R E P O R T R E S U M E S

ED 011 494 RE 000 112

ESTABLISHING A READING CENTER, A HANDBOOK ON REMEDIAL AND CORRECTIVE READING INSTRUCTION.

BY- RUSSELL, EARL V. THOMPSON, CHARLES L.
NORTH CAROLINA ADVANCEMENT SCHOOL, WINSTON-SALEM

PUB DATE 66

EDRS PRICE MF-$0.18 HC-$3.68 92P.

DESCRIPTORS- *READING CENTERS, *READING INSTRUCTION, *READING IMPROVEMENT, *REMEDIAL READING, READING TESTS, DIAGNOSTIC TESTS (EDUCATION), INSERVICE TEACHER EDUCATION, INSTRUCTIONAL AIDS, *READING MATERIALS, CONCEPT TEACHING, ADMINISTRATION, NORTH CAROLINA ADVANCEMENT SCHOOL, WINSTON SALEM

THE METHODS AND MATERIALS USED BY THE NORTH CAROLINA ADVANCEMENT SCHOOL FOR TEACHING REMEDIAL AND CORRECTIVE READING TO UNDERACHIEVING EIGHTH-GRADE BOYS ARE DESCRIBED. THE AUTHORS BELIEVE THE PATTERN OF DIAGNOSIS, GROUPING, INSTRUCTION, ASSESSMENT, AND REGROUPING IS CENTRAL TO DETERMINING THE CAUSES OF POOR ACADEMIC PERFORMANCE AMONG STUDENTS OF NORMAL OR SUPERIOR INTELLIGENCE. SOME OF THE AREAS DISCUSSED ARE PRINCIPLES OF CORRECTIVE AND REMEDIAL INSTRUCTION, SUGGESTIONS ON ADMINISTRATIVE PROCEDURE IN ESTABLISHING A READING CENTER, DIAGNOSIS, GROUPING, WHAT TO TEACH, THE LESSON PLAN, SPECIAL TEACHING TECHNIQUES (SUCH AS ALLOWING STUDENTS TO TEACH AND PURPOSELY MAKING MISTAKES), AND THE COSTS OF A READING CENTER. APPENDIXES PROVIDE INFORMATION ON READING ACHIEVEMENT TESTS, BASAL READING SERIES AND ADDITIONAL READING MATERIALS, SKILLS-GRADE LEVEL CHART, SPECIAL READING SKILLS FOR EACH ACADEMIC AREA, PACKAGED MATERIALS, INTEREST INVENTORY EQUIPMENT, SAMPLE LESSON PLANS, THE ROLES OF THE PARTICIPANTS IN A REMEDIAL READING PROGRAM, AND IMPORTANT BOOKS ON READING INSTRUCTION. (RH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Establishing A Reading Center

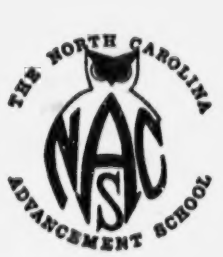
"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY Peter L. Buttenwieser TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

ED011494

CE 000 112

ESTABLISHING
A
READING CENTER

A Handbook on Remedial and Corrective Reading Instruction



Prepared At

THE NORTH CAROLINA ADVANCEMENT SCHOOL

by

EARL V. RUSSELL AND CHARLES L. THOMPSON

Cover and Illustrations By Ruth Ogle

© 1966 The North Carolina Advancement School

TABLE OF CONTENTS

Page

Introduction 5
Remedial and Corrective Reading Compared 7
The Relationship of Developmental to Remedial and Corrective Instruction 8
Principles of Corrective and Remedial Instruction 9
Practices Which Prevent Adherence to Sound Principles 10
Suggestions on Administrative Procedure in Establishing a Reading Center .. 11
Diagnosis 13
- Phase one: survey test 14
- Phase two: informal reading inventory and intelligence test 14
- Phase three: personality test, interest inventory, diagnostic and survey-diagnostic tests 15
- Preparing an Informal Reading Inventory 18

Grouping 27
What to Teach? 30
The Lesson Plan 31
- General Objectives 31
- Background Experience 32
- Discovering a Pattern 33
- Conceptualizing the Pattern 35
- Applying the Concept 36
- Assessing Progress 38
- Regrouping for Further Instruction 38

Special Techniques 39
The Economics of a Reading Center 43
Conclusion
Appendix A: Selected List of Reading Achievement Tests 44
Appendix B: Basal Reading Series and Additional Reading Materials 48
Appendix C: Skills-Grade Level Chart 51
Appendix D: Special Reading Skills for Each Academic Area 68
Appendix E: Packaged Materials 70
Appendix F: Equipment 74
Appendix G: Interest Inventory 77
Appendix H: Sample Lesson Plans 78
Appendix I: The Roles of the Participants in a Remedial Reading Program 85
Appendix J: Important Books on Reading Instruction 88
Glossary

The North Carolina Advancement School was founded in 1964 to determine the causes of poor academic performance among students of normal or superior intelligence, and to seek ways of eliciting greater achievement from such students.

Approximately three hundred underachieving eighth grade boys, selected from all areas of the state, attend each of the School's three month terms. The curriculum is evolved in direct response to this shifting student population, a fairly representative sample of North Carolina's underachievers.

As the instructional programs mature, they will be offered to the public schools in the state. This remedial and corrective reading handbook, the first major attempt at disseminating a program, is designed to assist any school interested in establishing a reading center comparable to the Advancement School's.

Reading centers assume priority over other special projects because it is in reading skills —so crucial in all academic courses — that North Carolina's students seem most strikingly deficient:

1. In 1964 the average ninth-grader in the state read at a level three-tenths of a grade below the national average for ninth

PRECEDING PAGE BLANK-NOT FILMED

grade students. The margin increased to one and two-thirds grades for the average high school senior.

2. A majority of the teachers and administrators who visit the Advancement School list deficiency in reading as their students' greatest problem.

3. Most of the nearly two thousand underachievers who have attended the Advancement School scored well below their grade level on the preliminary reading tests, reinforcing the impression that reading deficiency is closely related to generally poor academic performance.

Evidently, thousands of North Carolina's students need additional help in reading. Because there are so few specialists in the state, these students represent an almost insurmountable problem. The normal approach to remedial instruction, with highly-trained teachers working with impaired readers individually or in very small classes, is clearly inadequate in the face of such great numbers.

The problem is twofold:

(1) to devise a method whereby a teacher can deal effectively with a large class of students, and

(2) to equip teachers with the skills necessary for remedial work.

Preliminary results of an experiment undertaken at the Advancement School indicate that a teacher can, by subdividing his class according to carefully diagnosed proficiencies and deficiencies, work as effectively with a class of twenty students as he can with a class of five. If the results are valid, homogeneous grouping within the class may be a partial solution to the former problem.

It is hoped that this handbook will prove to be a step toward solving the latter. In the Advancement School's three-month in-service courses, many teachers without previous training in reading have become very proficient with the instructional method outlined here. The handbook is, in effect, the text for an in-service course any teacher may conduct for himself. The effort has been to incorporate the knowledge of many experts into a system of teaching that is easily learned.

Central to the system is the pattern of diagnosis, grouping, instruction, assessment, and re-grouping. That is, each student's reading problems are diagnosed in detail, and instruction is given accordingly. Such procedure does not yield a rigid, predetermined course, but a pool of educational resources from which a teacher must draw what is relevant to his students' needs.

Thus, the handbook is not an inflexible prescription for conducting each day's class, but an outline of the approach which seems to work at the Advancement School.

REMEDIAL AND CORRECTIVE READING COMPARED

Both remedial and corrective reading instruction attempt to bring the student's performance up to the level of his mental ability. A student of little natural ability and corresponding performance would not require such assistance; a student who performs just as well but has superior ability would be a prime candidate.

The classroom teacher provides corrective instruction to students performing slightly below capacity, while remedial instruction is given by a specialist to more deficient readers, usually in a clinic or some other institution separate from the normal classroom. It is more often necessary in remedial work to apply motivational techniques, or even to refer the student to a psychologist for assistance in removing his emotional blocks to learning.

As previously indicated, the Advancement School Reading Center has modified the normal remedial approach to accommodate greater numbers. Students referred to the Center generally suffer from impairment serious enough to deserve remedial instruction, but they are often taught in relatively large classes. The classes are subdivided so that the teacher actually works with his students in small groups, giving individual help to the most severely impaired.

A reading center can also provide classroom teachers with diagnostic test results and other information valuable in corrective and developmental courses.

THE RELATIONSHIP OF DEVELOPMENTAL TO REMEDIAL AND CORRECTIVE INSTRUCTION

Remedial and corrective instruction should be components of a total reading program designed to develop students' unfolding interests and capacities. The third and most familiar component, developmental instruction, begins with the simplest elements of language and proceeds by logical steps through the grades to build increasingly complex and potent skills. Great care is given to structuring the developmental program so that each step depends on those that have gone before and leads easily into the next.

The pace of a student's progress is governed by his ability and his will to learn, factors which vary greatly from individual to individual. Thus, if a reading program is to reach all students, it must include some system of diagnosis to determine how far each has progressed and some system of instruction flexible enough to accommodate students at various levels of achievement.

In the developmental course, each student should begin at his own level, regardless of grade placement, and move through the predetermined sequence at his own rate. Students performing below capacity should receive corrective or remedial instruction *in addition to* their developmental work.

Corrective and remedial courses concentrate on specific weaknesses. They omit those skills which the student mastered in the developmental instruction given in previous grades. For this reason they require more detailed diagnosis than is necessary for developmental work, where only the general level of performance is of concern.

The Advancement School Reading Center's staff feels that all reading instruction — developmental, remedial, and corrective alike — should be eclectic rather than limited to a single textbook approach. Different students respond to different materials and techniques, calling for great variety: workbooks, programmed materials, several series of basal readers, slides, tapes, filmstrips, films, teaching machines, high-interest stories for pleasurable reading, and mimeographed materials prepared by the teacher. (For particulars see Appendices *B*, *E*, & *F*.) Any reading course for students in any grade can draw materials from developmental courses for other grades.

PRINCIPLES OF CORRECTIVE AND REMEDIAL INSTRUCTION

The principles of corrective and remedial instruction differ little from those involved in developmental work. They are known, in one form or another, to most reading teachers:

1. Effective reading instruction depends on thorough and continual diagnosis of individual proficiencies and deficiencies, through both testing and informal analysis.

2. Instruction should be based on the profile of skills the diagnosis discovers, and constantly adjusted in response to the student's progress.

3. Materials should be sufficiently difficult to challenge the student but sufficiently easy to ensure his success. Otherwise he will quickly become either bored or discouraged.

4. Little or no pressure from teachers and parents should be brought to bear on the student. Reading is already a source of frustration and as such constitutes a threat to his security and self-esteem; pressure can only increase the threat.

5. To permit the teacher to pitch instruction directly to his students' individual needs, those with similar problems should be grouped together into classes.

6. The criterion of skill mastery, not the student's grade placement, should govern the substance, pace, and direction of instruction.

7. Individual assistance and personal encouragement should be readily available to all students. Homogeneous classes minimize unnecessary individual attention and allow the teacher to spend more fruitfully the time devoted to this important type of instruction.

8. No teacher should limit himself to a narrow range of materials or techniques. Individual differences may even require the application of several techniques to the same problem.

These principles, although limited, have served well as a general guide to instructional practices.

PRACTICES WHICH PREVENT ADHERENCE TO SOUND PRINCIPLES

Where test scores are not employed as a criterion for referral to a remedial program, it can easily deteriorate into a dumping ground for troublesome students of all kinds. Most schools already administer some form of achievement test, but the results are used only for general self-evaluation. Although these tests do not constitute a properly detailed diagnosis on which to base remedial instruction, they do provide a reasonable basis for initial placement.

Some extra assistance can be given within the regular classroom (corrective instruction), but a pupil should be referred to the Reading Center for further investigation when the disparity between his grade placement and his actual reading level is greater than *one year for the third grade, one and a half years for grades four and five, or two years for grades six through twelve.* Otherwise classroom teachers must neglect either the average and superior readers or those who need special assistance.

Many schools schedule remedial instruction for the after-school hours or during the time a student would ordinarily spend in study hall,

music, art, or extra-curricular activities. For several reasons, the Advancement School Reading Center staff believe it is preferable to fit remedial courses into the regular instructional day:

1. Effective remedial instruction should motivate and enable the student to recover any material he might miss while out of another class.
2. Unless a student is successfully involved in the learning activity of the classroom, he may as well be elsewhere, and few students in need of remedial help can cope with that activity.
3. The use of after-school time, especially when the student is sent to a remote instructional center, seems to make it difficult for the student to relate the remedial course to his normal classwork.
4. The student's attitude largely determines whether his reading problems can be solved, and if a remedial course entails sacrificing activities with strong appeal or time a poor reader is likely to need for study, he may develop antagonism toward the course itself.

If remedial instruction should not impose unnecessarily on students, neither should it be assigned to teachers who consider it an imposition. A teacher's resentment or indifference practically guarantees the failure of his remedial course. In many cases, Federal funds are available for training and employing teachers who are sincerely interested in remedial work.

A poor reader's parents, aware of reading's central role in nearly all academic learning, often experience great anxiety over their child's deficiency. The temptation to pressure him is strong; yet pressure only increases the child's own anxiety. An atmosphere of security is among the most important prerequisites to the success of a remedial program. When necessary, conferences with parents should seek to convert destructive pressure into understanding and encouragement.

SUGGESTIONS ON ADMINISTRATIVE PROCEDURE IN ESTABLISHING A READING CENTER

Begin with a small working committee of representatives from the administration, the counseling department, and the major academic areas. The committee should inform the staff and parents of the Center's objectives, methods, and limits. It should also seek suggestions from the staff on the relationship of the Reading Center to the existing structure of the school.

Survey the cumulative folders of the entire student body and administer any additional tests necessary to determine the proportions of the problem. This should yield some notion of the funds, personnel, and facilities the program will require. (For particulars, see the sections, "Diagnosis" and "The Economics of a Reading Center".)

Determine whether members of the present faculty can staff the Center and whether the present physical plant can accommodate a Center of the indicated proportions. It may be necessary to select only the most severely disabled readers at first, then to progress to the less serious problems. Accordingly, the Center may begin with minimum personnel, materials, and equipment and gradually accumulate more as funds permit.

If the Center is to be staffed from the present faculty, the teachers selected must be relieved of at least some non-teaching functions. It is essential that they have time to perform their demanding new duties, an impossibility if the Reading Center becomes only one more on a long list of responsibilities.

Establish precise criteria and standard procedure for referring a student to the Center and include the Center in all orientation programs for new students and staff.

Extend the basic principles of the Center, as outlined earlier, into the regular curriculum. They are of demonstrated soundness and are adaptable to every sort of reading program. On corrective and developmental instruction, and on the teaching of special reading skills required in each academic area, Center personnel may serve as consultants to classroom teachers. They should have a regular schedule of classroom observation, but it should be clear that such observation is not for the purpose of rating the teacher's performance but the occasion for genuine, unprejudicial assistance. Center personnel must foster a comfortable learning atmosphere for their colleagues as well as their students.

A few school systems already have a central remedial reading staff who keep a revolving schedule of appointments in the various districts. While this form of organization has advantages, it cannot provide the continuous consultation and instruction most schools require. A system with separate centers, of whatever proportions, is generally the most effective. Coordination may supplant the instructional function of the central agency.

DIAGNOSIS

Proper initial diagnosis of reading performance involves three phases:

1. A reading *survey test* assesses the student's general level of performance. It indicates whether a problem exists but does not reveal the specific deficiencies from which the student suffers.
2. An *informal reading inventory* provides a check on survey test results and explores the deficiency in greater detail. The performance level indicated by the inventory should be compared with the results of an *intelligence test* to determine whether the student is reading below his capacity. If he does seem to read at a level significantly below capacity, he should be referred to the Reading Center for further diagnosis.
3. *Diagnostic tests* or *survey tests with diagnostic features* pinpoint the particular areas of weakness. A *personality test* helps to indicate whether emotional problems are contributing to the difficulty, and an *interest inventory* reveals types of subject matter which will probably appeal to the student.

Survey, intelligence, diagnostic, and personality tests used at the Advancement School Reading Center are formal, or standardized. That is, from the scores of a nation-wide sample of students a table for converting raw scores into percentile rankings has been established. The grade level of any question can also be determined: if most eighth-graders answer a question correctly but most seventh-graders miss it, it may be considered an eighth grade level question. The reading inventory and the interest inventory are, of course, informal or non-standardized.

At least as important as this initial testing is the teacher's personal analysis at the outset and his evaluation of the student's progress after instruction begins. The teacher's normal examinations should serve not only to assign grades or marks, but also to assess the teacher's own performance. If tests indicate that a significant number of students have failed to master a skill taught with one approach, a revised approach is clearly required.

When the problems which caused a student to be referred to a reading center seem to be cleared up, he should be given alternate forms of the tests he took in the initial diagnosis.

Phase one: survey test

The Advancement School Reading Center has found the *Gates Reading Survey for Grades 3-10*[1] and the *Stanford Achievement Test:* (Reading Tests)[2] to be fairly valid survey tests. The staff generally prefers the Gates. Most survey tests yield scores on vocabulary, comprehension, rate, and total grade equivalent.

Phase two: informal reading inventory and intelligence test

The Center's informal reading inventory was composed according to guidelines laid down by Emmett Betts in his *Foundations of Reading Instruction.*[3] It is designed to ascertain levels of word recognition, comprehension of material the student reads orally, of material he reads silently, and of materials the teacher reads to him. Particular patterns of error are also noted.

Because most schools will want to compose their own inventories, a separate section on preparing an inventory will be required. This section also includes formulae for comparing intelligence test results with results of the inventory.

[1] *Gates Reading Survey for Grades 3-10* (New York: Bureau of Publications, Teachers College, Columbia University, 1960), by Arthur I. Gates. Three forms for grades 3-10.

[2] *Stanford Achievement Tests: (Reading Tests)* (Yonkers-on-Hudson, New York: Harcourt Brace, and World, Inc., 1964). Intermediate I—grades 4-5.5; Intermediate II—grades 5.5-6.9; Advanced Paragraph Meaning—grades 7-9.

[3] *Foundations of Reading Instruction,* (New York: American Book Co., 1964).

The *Lorge-Thorndike Intelligence Tests*[1] and the *California Test of Mental Maturity*[2] appear to be reasonably valid group intelligence tests. The *Otis Quick-Scoring Mental Ability Test*[3] may be used as either a group or individual test. The *Wechsler Intelligence Scale for Children*[4] and the *Stanford-Binet Intelligence Scale*[5] are good individual tests.

[1] *Lorge-Thorndike Intelligence Tests* (New York: Houghton-Mifflin, 1962), by Irving Lorge and Robert L. Thorndike. Grades kindergarten—1, 2-3, 4-6, 7-9, 10-12.

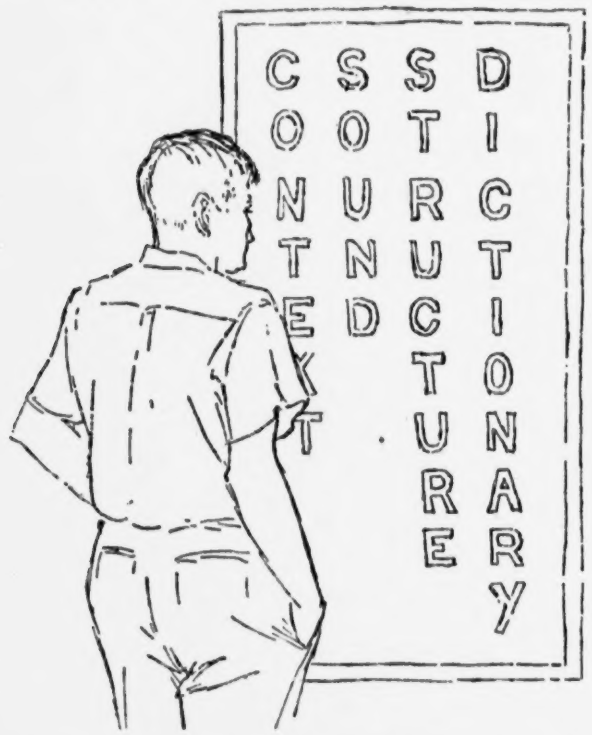
[2] *California Test of Mental Maturity* (Monterey, Cal.: California Test Bureau, 1963), by Elizabeth T. Sullivan, Willis W. Clark, and Ernest W. Tiegs. Grades 4-6, 7-9, 9-12, 12-16.

[3] *Otis Quick-Scoring Mental Ability Test* (Yonkers-on-Hudson, N. Y.: Harcourt, Brace, and World, 1962), by Arthur S. Otis. Grades 1-4, 4-9, 9-16.

[4] *Wechsler Intelligence Scale for Children* (New York: Psychological Corporation, 1949), by David Wechsler. Ages 5-15.

[5] *Stanford-Binet Intelligence Scale* (New York: Houghton-Mifflin, 1960), I. Q. tables revised by Samuel R. Pinneau and Louis M. Terman. Ages 2 and over.

Most intelligence tests measure both verbal and non-verbal ability, two types of abstract intelligence, or capacity to work with ideas and the relationships between ideas. One section requires the student to deal with abstractions presented in verbal form; this type of intelligence figures prominently in academic achievement. The other is entirely pictorial, diagrammatic, and numerical; it renders an appraisal of abstract intelligence with little distortion from verbal deficiencies.



As a rule, individual tests are more accurate, or valid, and provide results on more of the specific categories of intelligence. They do, however, have two disadvantages for public school use: (1) most must be administered by a trained psychologist, and (2) they require more time and effort to cover a large number of students. The *Otis* and the *Peabody Picture Vocabulary Test*[1] do not require special training to administer. The *Peabody* yields only a non-verbal score, but that score is valuable because it is remarkably independent of reading skill.

Phase three: personality test, interest inventory, diagnostic and survey-diagnostic tests

Survey-diagnostic and diagnostic tests locate specific strengths and weaknesses in the two principal areas of reading skill, word attack and comprehension.

[1] *Peabody Picture Vocabulary Test* (Minneapolis: American Guidance Service, Inc., 1959), by Lloyd M. Dunn. Ages 2-18.

Word attack may be broken down into four sub-areas: (1) the use of the *context* in which a word is found as an indication of its meaning, (2) the use of its *sound,* (3) its *structure,* and (4) the *dictionary.* The formula *CSSD* helps students remember the four avenues of attack on new words.

The Reading Center administers the *California Phonics Survey*[1] to assess the student's command of sound, structure, and some dictionary skills. Further diagnosis of context and dictionary skills is accomplished in the classroom after instruction has begun.

The *Gates Basic Reading Tests*[2] measure five types of comprehension with the following sub-tests: (1) general significance, (2) noting details, (3) level of comprehension, (4) understanding precise directions, and (5) vocabulary.

Other diagnostic tests should be used for further exploration of areas in which a significant proportion of students appear to be deficient. (For a listing, see Appendix *A.*)

The Reading Center's interest inventory was designed by the staff to reveal previous experiences with reading, attitude toward reading, special interests (which will be favored in the selection of materials assigned), the degree of esteem in which the student holds himself and the various members of his family, the extent and nature of his travel and other special experiences, his fears and ambitions, and his habits of study. It is most often given individually, a teacher posing the questions and noting the responses. (See Appendix *G* for a copy of the inventory.)

Employed in conjunction with the interest inventory is the *California Test of Personality*[3] which yields for each student an individual profile of personal and social adjustment. Together the tests provide teachers with clues to the type of materials and approach most likely to succeed with a given student.

The *California* test often fails to reveal very serious emotional problems because it depends on the student's perception of himself, a perception which severe emotional problems tend to distort. Fortunately, however, the severely troubled student can be identified during the course of instruction. Teachers should be alert to such problems, referring the student to a psychologist or psychiatrist whenever possible.

[1] *California Phonics Survey* (Monterey: California Test Bureau, 1963), by Grace M. Brown and Alice B. Cottrell. Grades 7-12.

[2] *Gates Basic Reading Tests* (New York: Bureau of Publications, Teachers College, Columbia University, 1958), by Arthur I. Gates. Grades 3-8.

[3] *California Test of Personality* (Monterey: California Test Bureau, 1953), by Louis P. Thorpe, Willis W. Clark, and Ernest W. Tiegs. Grades kindergarten—3, 4-8, 7-10, 9-16, and Adults.

In all three phases of initial diagnosis, the purpose of the tests used should be explained to the students, and the atmosphere in which they are administered, like that of instruction, should be warm, open, and encouraging. The eventual success of remedial work depends on the student's attitude, and his cooperation must be enlisted early in the process.

The Reading Center should furnish classroom teachers test data on students not referred to the Center, thus performing a diagnostic service for all developmental teachers and their students.

Preparing an Informal Reading Inventory

As previously indicated, the Reading Center's informal inventory is designed to determine levels of (1) word recognition, (2) comprehension of material the student reads orally, (3) material he reads silently, and (4) material the teacher reads to him. The test's complexity is reflected in this section of the handbook, which should be used in the same way a reference book is used: the reader should gain only a general understanding the first time through, returning to consult the handbook for directions on each step in preparing the inventory. Otherwise much effort will be wasted in trying to master the more technical aspects of the test.

Lists of words to be identified and the paragraphs to be read are chosen from one of the many series of basal reading texts available. In most series each book's appendix contains a list of new words introduced; preliminary check lists of twenty words at each grade level are drawn from these lists. The reading materials are chosen so that each selection makes sense by itself, and the selections grow longer from level to level, beginning with about two paragraphs.

To ensure consistency, only one basal series is used for each version of the test prepared. One version is administered in the initial diagnosis, another in those given at the end of the course — whenever the student seems to have overcome the difficulty.

The check lists and two selections for each grade level, one for oral and one for silent reading, are mimeographed and arranged sequentially in notebooks (all check lists first, then the paragraphs) so that several teachers can give the test at the same time. Each is given his own copy, complete with instructions, check lists and reading selections, comprehension questions for each selection, and record sheets. Every examiner also has a student copy, which contains only the reading selections.

Students are called in individually, and the examiner attempts to

set each at ease with informal conversation, always explaining the purpose of the test. The student should do his best but should not worry if he finds parts too difficult.

The word check lists are used to determine which selection the student will probably be able to read successfully. They save time by yielding a tentative word recognition level but are too brief to be conclusive.

Since the student should call out these sight words instantly, the examiner uses a cardboard sheet with a small window cut out to reveal one word at a time. He slides the sheet down each list at a rapid, even pace. If the student hesitates or asks for a word, the examiner merely assures him he is doing well and maintains the tempo, counting the hesitations and requests as errors. Mispronunciations are also errors, but self-corrections count as correct.

When the student misses more than five percent of the words in any list (more than one word in lists of twenty), the teacher stops him *at the end of that list.* He is to begin reading selections of the same level as the immediately previous list, the highest level at which he missed fewer than five percent of the words.

Examples:

Pre-primer	*Primer*	*Book I*	*Book II**	*Book III**	*Book IV*
look	now	sing	neighbor	peanut	miserable
fast	color	school	pretty	waited	proposed
go	good	dress	them	joins	series
and	will	found	animal	small	tornado
mother	please	bus	poor	funniest	anticipation

Before each selection, the teacher talks briefly with the student about it. This short readiness session serves to calm the student, to allay the initial fear which otherwise might impair his performance.

The word recognition levels are derived from notes the teacher takes while the student is actually reading the oral selections. The comprehension levels are derived from his performance on the check questions the examiner asks him immediately after each selection.

While the student is reading, the teacher notes these things:

I. Oral Paragraphs

A. Number of word recognition errors (Again, words asked for or mispronounced are errors, but self-corrections are correct. The

* Grades two and three are often divided into two sections each in basal reading.

test is untimed, so hesitations of reasonable duration are tolerated.)

B. Types of errors
   1. Complete refusal of word
   2. Initial refusal followed by correct or incorrect word
   3. Incorrect word on initial presentation

C. Analysis of errors
   1. Substitution of words or parts of words
   2. Omissions or insertions, especially of endings
   3. Reversals (e.g., *was* for *saw*, *no* for *on*)

D. Characteristics which need further examination
   1. Phrasing
   2. Rhythm (jerkiness, hesitancy, etc.)
   3. Estimated rate
   4. Pitch of voice
   5. Punctuation stops
   6. Finger pointing
   7. Posture and body movements

II. Silent Paragraphs

A. Number of word recognition errors (Here, of course, only words asked for can be counted.)

B. Characteristics which need further examination
   1. Vocalization
   2. Lip movement
   3. Head-turning
   4. Finger pointing
   5. Body movement
   6. Erratic eye movement

The only patterns of error or characteristics which are noted are those which are particularly outstanding. Thus the record sheet for a student may have checks by only a few of these categories, or, if he does badly, by nearly all of them. It may be possible while giving the preliminary check list to identify the aspects of a student's performance which deserve close attention.

The *word recognition levels* established are these:

Independent Word Recognition Level. When a student misses more than one percent of the words in any selection he reads orally, the grade level of the immediately previous set of selections is his independent word recognition level. He should be able to identify words in material of this degree of difficulty without help from any source.

It is also possible to establish word recognition levels from the silently-read paragraphs, in which case the same percentages of error would serve as criteria. As already noted, however, less performance data are available to the teacher for these paragraphs, simply because they are read silently.

For this reason and because people generally read better when they read silently, word recognition and comprehension levels derived from the silent selections are sometimes less accurate and nearly always higher than those taken from the oral selections. Therefore the Reading Center uses the levels derived from oral selections as a basis for referral.

Silent levels, however, do prove useful during the course of instruction; for example, homework assignments are often given on the basis of the silent independent word recognition and comprehension levels. Here the inventory is being described as an instrument in making referrals, so discussion of the silent levels will be omitted.

Instructional Word Recognition Level. When a student misses more than five percent of the words in any selection, the level of the immediately previous set of selections is his instructional word recognition level. With only occasional help from his teacher or a dictionary, he should be able to identify words this difficult.

Frustrational Word Recognition Level. When he misses more than ten percent of the words in any selection, the immediately previous set of selections corresponds to his frustrational word recognition level. It is

unlikely that a student would persevere with material at or beyond this level.

To aid the teacher in tabulating the results, his copy of the selections includes a word count and the computed number of errors allowable for each level. These figures are printed just above each selection.

After the student has finished reading a selection, the teacher makes a note of the errors and proceeds immediately to the comprehension check. He can figure the oral level later. The questions are asked and answered orally, and the student is not permitted to re-read for answers.

Each comprehension check includes four types of questions: factual, vocabulary, some requiring the student to draw inferences from the given material, and some which require him to draw from his own experience. From the checks, the examiner notes these things:

A. Number of questions answered incorrectly

B. Types of questions answered incorrectly

1. Factual
2. Vocabulary
3. Inferential
4. Experience

C. Quality of vocabulary used by student in answering

Here again, three levels are established:

Independent Comprehension Level. When a student misses more than ten percent of the questions on any selection, the immediately previous set of selections corresponds to his independent comprehension level. (If only four questions are given for each selection, a perfect score is required for the independent comprehension level.) He should be able to read materials this difficult without assistance.

Instructional Comprehension Level. When a student misses more than twenty-five percent of the questions on any selection, the immediately previous set of selections represents his instructional comprehension level. He should be able, with only minimal aid, to understand material of this degree of difficulty.

Frustrational Comprehension Level. When a student misses more than fifty percent of the questions for any selection, the immediately previous set of selections represents his frustrational comprehension level. Material this difficult will frustrate his attempts to read it.

Example:

Oral-Grade five

Readiness: Show the student a picture of a huge tree and talk with him about it. "Now read this paragraph to find out about the tree."
Number of words: 78

Errors permitted: independent — 1*
instructional — 4
frustrational — 8

Selection: A big tree, a very big tree, the biggest tree in the world, lives today in the mountains of the West. The Indians call the great tree Wa-wo-na. Even the tallest pine or fir tree in the forest is a dwarf beside him. He is so tall that, to see his top, you must bend your head far back and let your eyes travel up, up, and still up. He is as big inside as a small house.

* Percentages are figured in decimals and rounded off to the nearest whole number.

Comprehension Check:

Errors permitted: independent—0 instructional—1 frustrational—2

*F 1. How big is this very big tree? (Biggest in the world)

I 2. What proof is given that this is the biggest tree in the world? (None)

E 3. What tall trees have you ever seen? (Accept any sensible answer.)

V 4. What is a dwarf? (Accept any reasonable definition.)

When the student has progressed through the selection until all these levels have been determined, he is ready for the final section of the IRI, the Hearing Capacity Test.

In this section the examiner readies the student just as before but reads the paragraphs to him, returning to the usual procedure for the comprehension check. The examiner begins with the paragraph next *after* the one corresponding to the student's frustrational comprehension level.

From the Hearing Capacity Test the examiner should note these things:

A. Number of questions answered incorrectly

B. Quality of vocabulary used by student in answering

* Letters denote the type of question: *F*actual, *I*nferential, *E*xperience, and *V*ocabulary.

C. Habits of attention

The last paragraph for which the student correctly answers at least seventy-five percent of the questions represents his *Hearing Capacity Comprehension Level,* an important factor in determining the appropriate vocabulary for his teacher's use in the classroom.

SUMMARY OF CRITERIA

	Ind.	Instructional	Frustrational	Hearing Capacity
Word Rec.	1 %	5 %	10%	
Comprehension	10%	25%	50%	25%

After the results of the IRI are recorded, the amount of reading retardation each student has suffered may be computed. The amount of retardation (not to be confused with mental retardation) is the gap between a student's *reading expectancy level,* representing his potential, and his *instructional comprehension level,* a reflection of his degree of actual achievement.

The expectancy level is computed with this formula:

$$\text{Number of years in school} \times \frac{\text{I.Q.}}{100} + 1.0 = \text{Reading Expectancy Level}$$

There are many different ways of relating a student's mental ability to his reading performance, producing much debate as to which is the best method. Probably the most frequently used approach is to

consider that a student should have reached a reading age or grade roughly comparable to his mental age or grade. The Advancement School Reading Center has chosen the formula above on the basis of a study by Bond and Clymer (reported in *Reading Difficulties: Their Diagnosis and Correction*[1]) which challenges the reading age-mental age comparison as a method of identifying the disabled reader.

According to the reading age—mental age method, Bond and Clymer point out, a student with an I.Q. of 150 entering the first grade at the age of 6.5 should be able to read at a 4.3 level, his mental grade (that is, he is as far along in general mental development as the *average* child is at fourth grade, third month.) "As a matter of fact," Bond and Clymer continue, "such a child would typically be able to read little, if anything, because he has not yet been taught."

> But on the whole, it can be assumed that the usual child with 150 I.Q. can be expected to learn new things, when presented, about one and a half times (150 = 1½ x 100) as fast as the average child (100 I.Q.). Likewise, the child with a 75 I.Q. can be expected to learn them only about three fourths as fast (75 = ¾ x 100) as the average child. If we assume that the I.Q. is an index of rate of learning each new experience (an indication of how fast the person can learn), a child, at the end of the first grade, will have learned to read according to the formula:
>
> *I.Q. times years in school plus 1.0 equals reading grade.*
>
> (That is, rate of learning times amount of instruction equals amount of learning.) The 1.0 is added because the child *starts* school at grade 1.0 and after a year in school, the average child is at grade 2.0 or just entering the second grade.

Bond and Clymer give statistics to show that reading expectancies computed with their formula seem to be more in line with students' actual development than those computed by the mental age method.

To obtain the most accurate results with the Bond and Clymer formula, months completed should be expressed as fractions of the school year (e.g., 8 years and 3 months — 8 and 3/9 or 8.33.)

As stated earlier, once the reading expectancy level is computed it should be compared with the instructional comprehension level, using this formula:

expectancy level — instructional comprehension level = amount of retardation.

[1] *Reading Difficulties: Their Diagnosis and Correction* (New York: Appleton-Century-Crofts, 1957), by Guy L. Bond and Miles A. Tinker, pp. 76-81.

Generally Advancement School students for whom the degree of retardation thus computed amounts to two years or more are referred to the Reading Center for remedial instruction. Thus an eighth grade student who has achieved an eighth grade reading level might be referred to the Center. Suppose that he has actually spent eight full years in school and has an I.Q. of 120:

$$8 \times \frac{120}{100} + 1.0 =$$

$$8 \times 1.2 + 1.0 = 10.6, \text{ or } 2.6 \text{ years of retardation.}$$

Although Bond and Clymer state the formula

I.Q. X years in school + 1.0 = expectancy,

it should be obvious that the first term of the equation actually ought to be $\frac{\text{I.Q.}}{100}$ rather than simply I.Q., because what really matters is how the student's I.Q. compares with the average, which is 100. That is, how fast can the student learn relative to the average student's pace of learning? More quickly or more slowly?

Diagnosis: Conclusion

In the foregoing section, "Practices Which Prevent Adherence to Sound Principles," criteria for grades one through twelve are given.

In that section the criteria represent the difference between actual grade level and reading level; there they are used to indicate a need for further investigation. If that investigation shows between *reading expectancy level* and actual reading level a disparity which is greater than the same criteria, a referral should be made.

In other words, the same criteria are used for two distinct purposes: (1) to reveal a need for further investigation, and (2) to indicate whether a referral should be made on the basis of information gathered in the investigation.

The criteria are these: one year for grade three, one and a half years for grades four and five, and two years for grades six through twelve.

In summary, proper diagnosis of reading performance involves three phases. First comes a survey to determine the student's general level of performance. Second, an informal inventory and in intelligence test to ascertain whether the student is performing below capacity. Third, a series of personality and diagnostic tests to pinpoint the problem. Of course, only those students identified as disabled readers need the third phase.

GROUPING

The difficult but essential process of grouping students homogeneously is the link between diagnosis and instruction. Sound homogeneous grouping permits the teacher to key his work directly to every student's needs, but an error in judgment at this stage flaws the whole course of instruction that follows.

The most obvious grouping procedure would simply assign students to classes on the basis of diagnostic test score totals, which represent their general performance level. Such procedure is well-suited to developmental instruction but inappropriate to remedial work, which deals with specific deficiencies.

Another method is to schedule classes in every skill, then fit students into the scheme. This method, however, often results in a quandary over students who are deficient in more than one area. Moreover, it entails inefficient use of teaching personnel. Effective grouping requires a preliminary survey of test scores to discover the prevailing patterns of deficiency. Only such a survey can enable a reading center to place its teaching resources precisely where they are needed.

The Advancement School Reading Center formulates a master chart of all diagnostic test scores for every referred student, notes the

patterns and assigns as many students to a class as share a combination of deficiencies.

Usually several students appear unable to use context, syllabication, or another cue in identifying new words. Some read with good comprehension despite the handicap; others have a comprehension problem as well. Thus these students must be divided into at least two groups. If for each particular facet of a skill there is a significant number of students having trouble, several groups may be necessary.

Only after tentative groups have been established does the Center consider the problem of staffing the indicated number of classes. Whenever possible, the teachers are assigned to teach the level and type of material that interests them most.

If there are too few to go around, some of the smaller groups may be consolidated. Perhaps six students have failed to master one aspect of phonics; three more, another aspect; and five more, still another. Because these problems are intimately related, the students might as a matter of expediency be placed in a single class. The teacher should know which aspect troubles which students and should subdivide his class accordingly.

Data gathered in the Advancement School Reading Center indicate that by subdividing the class on the basis of specific disabilities, a teacher can work just as effectively with a class of twenty students who read on approximately the same level as he can with a similar

group of five similarly divided. It seems, therefore, that *homogeneity, not class size, is the most important factor in grouping students for remedial instruction.* Size *is* important, though, and the Center sets a maximum of twenty students to a class.

In the public schools, where small classes (eight or ten students) may not be feasible, the technique of subdividing may alleviate staffing as well as instructional problems by enabling a single teacher to handle a relatively large number of students.

Many schools may wish to administer tests near the end of the Spring term in anticipation of Fall placement, to allow sufficient time for scoring and interpretation of results.

To encourage and facilitate more individual and small group work where it is needed, developmental classes composed of low-scoring students should be smaller than those for the high-scoring. This will also compensate teachers assigned to low-scoring classes.

There is some question whether students who have similar disabilities but happen to be in different grades should be placed in the same remedial classes. The Advancement School Reading Center Staff believe that as a rule they should be assigned to the same class regardless of grade, but it may be wise to limit the grade range of students placed in a class. A student's embarrassment at what he recognizes to be very low placement can thwart the whole remedial effort. The elementary, junior high school, and high school divisions which already exist furnish a convenient, practical set of limits. Such limits are also in accord with the Center's belief that every school should have its own reading center.

In any event, no student should be condemned by initial placement to a group whose purpose he may outgrow. Frequent re-evaluation should find the student making sufficient progress to move up into a new group from time to time, finally outgrowing the need for remedial work altogether.

After initial placement, the teacher presents elementary concepts in the group's area of deficiency, then gives a test which requires his students to employ them. Those who fare badly with one or more of the concepts divide into subgroups for further instruction.

Some have no trouble with elementary material, for their deficiencies lie at a more advanced level. These students are regrouped according to their interests (common practice during class periods to reinforce new learnings) and allowed to apply the concepts to material of their own choosing.

Since the teacher must *remain* in touch with student needs, this process is repeated at each step. Diagnosis and regrouping go on continually.

WHAT TO TEACH?

So far, much has been made of *de*ficiencies, but no explicit, comprehensive standard of *pro*ficiency has been offered. Exactly what knowledge and skills must a person command in order to read well at a third, or eighth, or twelfth grade level?

This question amounts to a demand for a systematic analysis of the whole reading process. Fortunately, many excellent analyses have already been conducted, usually as groundwork for basal programs or for diagnostic tests.

Basal programs begin with the elements their developers have found simplest and most essential, then gradually evolve more complex skills. They are geared to grow apace with the child, to develop his maturing interests and ability to learn. Sequential reading texts, one or more for each grade level, are the most familiar components of basal programs, but many also include workbooks and a teacher's manual for instruction in the skills required for the progressively more difficult readings.

Although reading experts differ over the proper sequence and even the importance of some skills, they are in accord about most. Thus it is possible to establish a fairly secure consensus on what ought to be learned and the point at which each element ought to be introduced. (See Appendix C.)

Because of the diversity of individual learners — in motivation, intelligence, and experience — no basal program can, by itself, truly serve them all. This is not sufficient reason, however, to discard as answers to our original question the basal reading programs and the very substantial research on which they are founded. Instead, they must be adapted to reach a wider range of students, and they must be used in concert with films, filmstrips, records, programmed materials, teaching machines, and other materials which contribute to a varied and interesting program.

Diagnosis and grouped instruction promote the indicated flexibility without sacrificing the purposeful, orderly sequence of basal programs. They merely help to place students at their proper level in the sequence. The basal outline of skills remains a good answer to the question, "What should be taught, and in what order?" Furthermore, it can be a powerful instrument for the remedial as well as the developmental teacher.

THE LESSON PLAN

Advancement School Reading Center personnel use an outline they have synthesized from several basal programs to determine the source of deficiencies identified in diagnosis. (See Appendix C.)

If, for example, a student seems to have trouble with a particular phonics skill, the teacher refers to the outline and finds, perhaps, that the skill is generally taught in the fourth grade. He then gathers material from several fourth-grade texts, workbooks, supplementary readers, teacher's guides, and other sources. From these he distills a summary of what is to be taught and begins to prepare a lesson plan. (See Appendix H for sample lesson plans.)

Most lesson plans will fit the following format:

1. *General Objectives.*

   If flexibility is not to degenerate into formlessness, the teacher must remain continually aware of his instructional goals. A clipped, straightforward statement of the objectives for each lesson helps Advancement School teachers retain a sense of purpose in their teaching.

Example A. Word Recognition: one aspect of phonics

1. To teach the consonant blends
2. To teach the consonant digraphs
3. To teach the difference between consonant blends and digraphs

Example B. Comprehension: first step in the technique of survey

1. To teach the use of the table of contents and index
2. To teach the use of the introduction and preface
3. To teach the method of skimming chapter subheadings, margin guides, first and last paragraphs, topic and summary sentences

2. *Background Experience.*

When the objectives are established, the teacher begins to construct a bridge between these final goals and the student.

Example A, continued. Ask a student what his initials are. Ask the class what the word "initial" means. Continue asking questions until a satisfactory definition is formulated.

"The words we are going to study today are not new. You've probably been using them for years. We're just going to examine them more carefully to try to find out some new things about them.

"As you pronounce these words with me, pay particular attention to the sound of their initial letters. There are two lists:"

List 1.	blue	brown	scat	twine
	claw	throw	skate	dwindle
	flag	crow	squash	dwarf
List 2.	church	thick	shot	where
	ship	why	photo	when
	phone	child	thin	what

Example B, continued. "Before a road or a building is built, a group of men go out to look over the land. Have you ever seen men doing this?"

Discuss the student's experiences.

"What do you call these men? What do you call the job they do?"

"Today we're going to learn to do a different sort of surveying."

3. *Discovering a Pattern.*

The crux of the Advancement School Reading Center's instructional method is discovery.

In Example A, for instance, the teacher has selected two groups of words whose initial letters combine in different ways. If the student examines them carefully, he finds that the first two letters of each word in both lists are consonants, which he has studied previously. Further, the initial consonants in each word in List 1 blend together, but to a large extent each retains its normal sound. He notices that the initial consonants in List 2 change completely: together they produce a new sound which only faintly resembles their respective normal sounds.

When the student has perceived the similarity between the words in each list and the difference between the two lists, he has *discovered a pattern.* When, in the next step of the lesson, he has described the pattern, he has formulated a *principle* which he can use in any specific case to distinguish a consonant blend from a consonant digraph.

Example B capitalizes on the student's previous non-academic experience, reorganizing it and stating it as an informal definition of the word "survey." Before, this word had only a vague connection with men who use technical instruments in some mysterious way; their actions become sensible when the *principles* behind all this arm-waving and sighting are understood. That is, when the underlying *pattern* has been discovered. By analogy the principles behind land surveying become the principles behind the reading technique of surveying.

In Example A, the teacher provides the students with an experience — reading the word list aloud — which has an underlying pattern to be discovered. There is a definite relationship between the initial sounds of the words in the two lists and a definite reason for the difference. In Example B, it is unnecessary to provide the experience in the classroom, for it is likely that many students are already familiar in a general way with surveying. Whether the experience comes in the classroom or elsewhere, it is something immediate and concrete, something meaningful to the students. It is the raw material of academic learning.

The order here is the reverse of that employed in normal teaching procedure: generally the student must memorize a set of definitions or axioms before he has any experience with the patterns they explain, or make explicit. He has no sense of their usefulness and very little sense of their meaning. Anyone who has tried to read very abstract philosophy, where the concepts are distantly related to his own experience, can sympathize with the student.

In the effort and excitement of tracing a pattern for themselves, students gain a sense of immediacy, purpose, underlying order, and achievement. More firmly than rote memorization ever could, they imprint the pattern in their own minds, and also prepare themselves for more independent thought.

Diagnosis and grouping place students at a level where they are capable of discovering the principles they need to know. Teachers choose the information students need if they are to make these discoveries, and pose questions to press the students toward the conclusions they must reach for themselves.

In the early stages of remedial instruction, some students require so much patience, encouragement, and variety that the teacher is threatened with emotional and intellectual exhaustion. Once they encounter and acknowledge their problems and begin to make progress,

however, the momentum picks up, carrying over from one discovery to the next.

Example A, continued. "What are the initial letters of the words in List 1? In List 2?" Consider each word separately.

"Is there any difference between the initial letters of the words in List 1 and the initial letters of the words in List 2?"

Continue to question the students until the difference is established.

Example B, continued. "The instrument a surveyor looks through to measure the land is called a transit. By using this transit and other instruments, he can get a good general idea about the lay of the land. Then he can set up some guidelines for the road or building that will be constructed."

Discuss with the class the analogies between land surveying and surveying as a reading technique.

"We said that the transit is one of the instruments a land surveyor uses. What are the reading surveyor's instruments?"

Distribute a set of basal readers and have the students make a list of reading survey instruments.

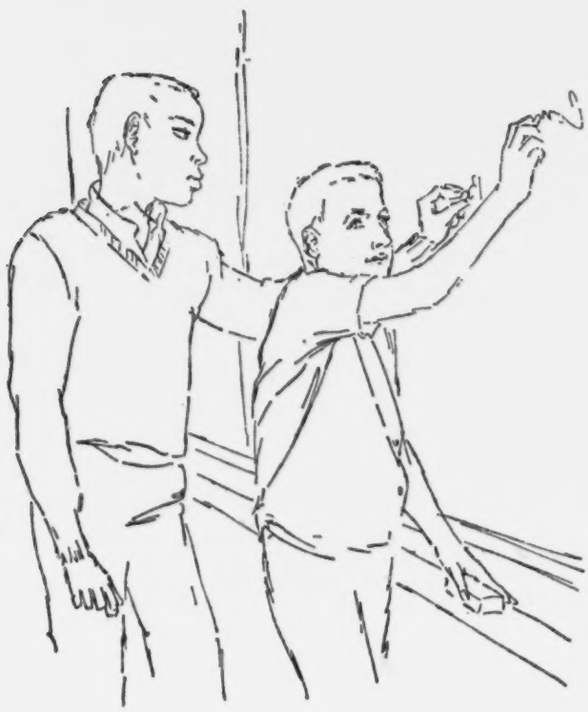
4. *Conceptualizing the Pattern.*

Although the remedial reading students at the Advancement School have shown remarkable aptitude for sensing patterns in the learning experiences teachers prepare for them, they generally find it difficult to fashion the patterns into coherently-stated concepts. Thus the teacher often must intervene at this point to assist students in making a clear statement of the principle behind the pattern they have recognized.

Example A, continued. Continue the discussion until the difference between the consonant blends in List 1 and the consonant digraphs in List 2 is established. Ask questions which lead students toward definitions of the two. Select students to write the definitions on the board.

Example B, continued. Use the analogies between a land survey

and a reading survey to ask questions which lead students to a step-by-step procedure for surveying material. Select students to write the steps on the board.



5. *Applying the Concept.*

Because remedial students generally have very short attention spans, teacher-directed instruction should occupy only about twenty minutes of each class period. The remainder should be spent on exercises or activities which reinforce the learnings gained in the teacher-directed portions of the class.

Workbook-style exercises may be used now and then, but too much reliance on one sort of material is certain to dull the students' interest. Activities should be as imaginative as the teacher can make them: playing games involving the concepts taught, making posters illustrating them, reading high-interest stories, using teaching machines, and viewing films and filmstrips.

When teaching word-recognition skills, use for exercises words the students suggest or words from hobbies, sports, movies, and subjects in which they have expressed an interest. Boys seem responsive to words like carburetor, halfback, skin-diver, schooner, fishing and

so on. Interest inventories and conversation with students are good word sources.

When teaching comprehension skills, choose practice books and stories on topics students want to explore. It may be necessary to use four or five different stories at a time, depending on the range of interests and reading levels.

Example A, continued. "As you watch this short film about football, write down all the words with consonant digraphs in one column and all those with consonant blends in the other. Let's see who can correctly identify the most words."

Check the test records for levels on blends and digraphs and assign workbook exercises accordingly. Check into the possibility of using the Language Master.

Example B, continued. Gather a variety of material at each student's instructional reading level. Group students when possible. Allow them t survey the material, to choose a story or article, and to survey it in more detail. Call for volunteers to report on the readings, then ask

several other students to recount the steps in their surveys.

6. *Assessing Progress.*

When the teacher feels that most students have grasped at least the rudiments of a skill and that their knowledge has been properly reinforced in practice, he composes a test to determine which students need more help on which aspect of the skill. He always informs students of the test's purpose: every test should be an instrument of instruction, not a threat to the students.

7. *Regrouping for Further Instruction.*

Both the importance and the means of regrouping have already been discussed.

Every lesson plan is tentative and may require one day or sev-

eral to implement. Extensive revision is nearly always necessary; the objectives remain constant, with the means adapted to fit the students.

SPECIAL TECHNIQUES

1. *Adapting The Language of Presentations to The Students*

With experience, most teachers learn to sense quite accurately the limits of their students' vocabularies. Yet nearly every teacher occasionally discovers, after having to repeat an explanation several times, that the problem lies in his own terminology. Once a crucial word or phrase is clarified, the difficulty seems to disappear.

The IRI Hearing Capacity Test, discussed earlier, helps Advancement School teachers to select words at the proper level of difficulty for each group of students, thereby reducing the number of such cases.

Frequent use of synonyms for important words and of analogies for difficult concepts, especially when they are chosen from subjects or activities which interest the students, also seems effective. There is nothing new about this suggestion, but a reminder is sometimes worthwhile.

2. *Purposely Making Mistakes.*

That they often make errors themselves Advancement School teachers readily admit to their students, making it clear as well that they are open to corrections. "Furthermore," the students are told, "I'm going to make some mistakes on purpose, and I hope you will catch them."

This admission is usually a welcome surprise; students appreciate the honesty and understand that the teacher is on their side. It also draws out comments which reveal students' difficulties, comments they would otherwise be reluctant to make. Listening to the teacher becomes an absorbing game.

Teachers also find that the question, "What do you think the answer is?" elicits far more response than, "What is *the* correct answer?"

3. *Allowing Students to Teach*

Sometimes a student can identify and straighten out the difficulties of a classmate whom teachers could not reach. Thus, a student who learns quickly may be asked to teach a group of slower learners. His advantages are a viewpoint close to that of his classmates, and rapport with them. Usually he learns as much by teaching as his class-

mates do by being taught. Very frequent use of this technique, however, does cut into the time a fast learner should use to pursue his own reading interests.

4. *Answering Questions With Questions*

To the question, "Why do I have to learn how to read?" the teacher replies, "I agree, why should you?" Soon students themselves answer very satisfactorily, and they believe their own answers. They only accept a teacher's, even if both sets of answers are identical. The same seems to be true of questions on subject matter.

5. *Clarifying Mutual Responsibilities*

When an Advancement School Reading Center student fails to turn in an assignment, he is called in for a private conference:

"Johnny, I'm paid to teach you how to read, but nobody can teach you anything you don't want to learn. I can't do my job if you don't do yours, and homework is a big part of your job.

"When you don't hand in your assignments, it makes me think you don't care about learning to read. Is that true?

"Can you think of any reasons why you might be better off if you could read well?

"I'll tell you what — if you'll promise to do your part, I'll promise to do mine. Here's a contract that says you agree to do the assignment for tomorrow, and in return, I agree to read your work and to help you learn whatever skills your homework shows you still don't understand."

A student is never pressured to sign, for the contract is a way of emphasizing that each party voluntarily takes on certain responsibilities. A new contract, with a detailed statement of each party's duties, is prepared for every assignment.

When the reasons behind assignments are explained, and when the student's freedom of choice is recognized, he usually begins to perform not only responsibly, but with enthusiasm as well. Before long the word gets around, and other students actually request contracts.

It is not clear whether the effectiveness of this technique lies in the dignity granted the student or in the excitement of the solemn contracts, but the fact of its success remains.

6. *Teaching Through Tests*

Test papers covered with red pencil marks and returned without

explanation or personal encouragement are partially responsible for many failures. Just a short private conference is usually sufficient to teach a disheartened student how to use corrections as guides in reviewing the skills he finds difficult, thus transforming his attitude toward tests.

7. *Competing In Teams*

Generally a Reading Center student is encouraged to compete only against his own previous performance, but when employed sparingly, team competition can provide excitement without discouraging poor students. While individual competition carries a threat of embarrassment, a student may lose himself in his team, yet still enjoy and learn from the experience. Good students come to be admired rather than resented.

8. *Using Interludes of Directed Reading To Inject Variety*

When several days in a row have been spent on one topic, syllabication or diacritical marking for instance, it is well to allow the students to read something of their own choosing before proceeding to a new unit. This renews their interest and restores their sense of reading's usefulness. Such interludes are also good occasions for teaching the use of the introduction, table of contents, chapter headings, pictures, diagrams, index, topic sentences, and dictionary. The format outlined earlier, in "The Lesson Plan," may be adapted to fit directed reading activity; the step, "applying the concept," may be interpreted here to mean, "discussing the stories." Other steps may be similarly reinterpreted and rearranged.

9. *Teaching The Special Reading Skills Involved in Math, Science, Social Studies, and English* (See Appendix *D.*)

10. *Explaining The Remedial Process To The Student*

An understanding of the purpose of each step in instruction and of the relation of each step to the total process helps the student to sustain his effort throughout the course, allows him to gauge his own accomplishment, and enables him to use his experience in the Reading Center model to guide his work in other academic situations.

11. *Experience Stories*

By the time a non-reader reaches the age of twelve or thirteen, he has usually suffered enough frustration and discouragement to harden him against a teacher's best efforts. His school problems are often complicated or even caused by conditions in his home and neighborhood. It must seem to such a youngster that there is no room

in the adult world for his own interests and enthusiasms, and that the best course is either to ignore that world or to attack it.

The experience story technique, developed by several authorities on the teaching of reading in the primary grades, is employed at the Advancement School to rouse non-readers and functionally illiterate students from their apathy and to teach them basic skills. It has, as all good teaching techniques have, both motivational and instructional value.

Composed by the teacher from the student's description of experiences he enjoyed, activities he likes, or even things he would just *like* to do, the stories gradually accumulate to form a sort of autobiography. The language, with a few corrections and additions, is the

student's own. He may draw illustrations or cut them out of magazines, whichever he prefers. The scrapbook is a source of pride and achievement, his book.

The teacher uses it just as he would use a primer, but with far more assurance of the student's interest. Words the student has used for years are often unknown to him in written form, but encouraging and familiar all the same. In addition to these, the teacher may introduce into each story a few words from a basal vocabulary list, thus promoting a smooth transition from the familiar to the unfamiliar, from stories about the student himself to stories about other people and their surroundings.

Phonetics, structural analysis, use of context, use of the dictionary — in fact, nearly all basic skills — may be taught in relation to the experience stories.

THE ECONOMICS OF A READING CENTER

Suggestions on diagnostic tests, special equipment, basal and supplementary reading materials appear in the appendices along with producers and price quotations.

Other costs include advisory services; rental fees on films, filmstrips, and slides; renovation or adaptation of classrooms; and, by far the most important, a trained staff.

The staff should be sufficient in number to support classes of no more than ten to twenty students, with time remaining for preparation, consultation with subject matter teachers, and the tremendous quantity of paperwork involved in operating a reading center.

CONCLUSION

Throughout this handbook the Advancement School Reading Center has been used as a model, not because it is perfect, but because it is imperfect. Nowhere has there been an attempt to say the last word, to prescribe *the* correct procedure for teaching remedial reading. Instead, the effort has been to describe the Center's practices, to explain the reasoning behind them, and to suggest that they represent one fairly successful approach.

It is, moreover, an extremely flexible approach. "Adapt instruction to each student's needs," is its principle, and its first corollary is this: "The range of student needs is far too wide for a single textbook, for a predetermined program, for mass instruction."

Although developments in educational technology have received little attention in this volume, Advancement School teachers do make extensive use of teaching machines and other devices. Teachers are encouraged to explore them as aids to varied instruction, not as substitutes, but as exciting accessories to personal teaching.

Diagnosis and grouping have received more attention than the teaching process itself for two reasons:

1. The necessity for flexibility prevents a detailed prescription for each lesson.
2. Most teachers with whom the Advancement School has had contact have expressed a greater need for information about these processes.

Diagnosis, grouping, instruction, assessment, regrouping: so goes the cycle, moving toward the mainstream; but not without the efforts of creative, conscientious teachers all over North Carolina.

APPENDIX A

SELECTED LIST OF READING ACHIEVEMENT TESTS

Survey Tests

1. *Metropolitan Reading Tests.* Yonkers-on-Hudson, New York: World Book Co., 1962. Three forms for five levels 2, 3-4, 5-6, 7-9.

2. *Nelson-Denny Reading Test,* by Frank L. Clapp. Boston: Houghton Mifflin Co., 1960. Two forms for senior high school and college.

3. *Sequential Tests of Educational Progress* (known as STEP test). Princeton, N. J.: Cooperative Test Division, Educational Testing Service, 1963. Two forms for each of four levels: level 4, grades 4-6; level 3, grades 7-9; level 2, grades 10-12; level 1, college freshmen and sophomores. Yields percentile scores on comprehension, including: 1) ability to reproduce ideas; 2) ability to translate ideas and make references; 3) ability to see the motives of the author; 4) ability to sense organization or presentation; 5) ability to criticize passages.

4. *Stanford Reading Test.* Yonkers-on-Hudson, New York: World Book Co., 1964. Forms for grades 2 through 9. Yields scores of word meaning and comprehension.

5. *Iowa Tests of Basic Skills,* by E. F. Lindquist and A. N. Hieronymous, Boston: Houghton Mifflin Company, 1955-56. For grades 3-9. Forms 1 and 2. A development of the well known *Iowa Every Pupil Tests of Basic Skills* but with important improvement. An achievement battery that tests vocabulary, reading comprehension, language skills, work-study skills, and arithmetic.

Survey Tests with Diagnostic Features

1. *California Reading Test,* by Ernest W. Tiegs and Willis W. Clark. Los Angeles, California: California Test Bureau, 1963. Primary Battery for grades 1, 2, 3, and lower 4, four forms; Elementary Battery for grades 4, 5, and 6, four forms; Intermediate Battery for grades 7, 8, and 9, four forms; Advanced Battery for grades 9 to 14, three forms.

2. *Cooperative English Tests, Reading Comprehension,* Princeton, New Jersey: Educational Testing Service, 1960. Lower level for senior high school, three forms; higher level for grades 13 and 14, four forms.

3. *Diagnostic Reading Tests,* Survey Section, Chicago, Illinois: Science Research Associates, 1963. For junior high school through college freshmen.

4. *Examiner's Diagnostic Reading Record for High School and College Students,* Ruth Strang and others. New York: Bureau of Publications, Teachers College, Columbia University, 1952.

5. *Gates Reading Survey for Grades 3 to 10,* by Arthur I. Gates. New York: Bureau of Publications, Teachers College, Columbia University, 1960. Vocabulary, Level of Comprehension, Speed, and Accuracy. Three forms for grades 3 to 10.

6. *Gates Primary Reading Tests,* by Arthur I. Gates. New York: Bureau of

Publications, Teachers College, Columbia University, 1958. Three forms, each consisting of three parts, for grades 1 to 2.5. *Advanced Primary,* grades 2.5 to 3.

7. *Iowa Every-Pupil Tests of Basic Skills.* Test A, Reading Comprehension and Test B, Work Study Skills, by Ernest Horn, Maude McBroom, H. A. Greene, E. F. Lindquist, and H. F. Spitzer. Boston, Massachusetts: Houghton Mifflin Company, 1956. Elementary Battery, grades 3 to 5; Advanced Battery, grades 5-9, four forms.

8. *Iowa Silent Reading Tests,* Yonkers, New York: World Book Co., 1956. Elementary Test, New Edition, Revised by H. A. Greene and V. H. Kelley, four forms for grades 4 to 8.

9. *Iowa Silent Reading Tests,* Yonkers, New York: World Book Co., 1956. Advanced Test, New Edition, revised by H. A. Greene, and V. H. Kelley, four forms for grades 9 to 14.

10. *Kelley-Greene Reading Comprehension Test,* by Victor H. Kelley and Harry A. Greene. Yonkers-on-Hudson, New York: World Book Co., 1955.

Diagnostic Reading Tests

1. *Analytic Reading Scales,* by M. J. Van Wagenen, Psycho-Educational Research Laboratory, 4549 Bloomington Avenue, Minneapolis 7, Minnesota. Three levels, Intermediate Division for grades 4 and 5; Junior Division for grades 6 to 9; Senior Division for grades 10 to 12 and college, four forms of rate-comprehension section.

2. *Diagnostic Reading Tests,* by Committee on Diagnostic Reading Tests, New York; Committee on Diagnostic Reading Tests, Inc., 419 West 119th Street. *Higher Level* for grades 7-13. Survey Section, eight forms; Diagnostic Sections, two forms each, as follows: Section I, Vocabulary; Section II, Comprehension, Part I, Silent, Part 2, Auditory; Section III, Rates of Reading, Part 1, General, Part 2, Social Studies, Part 3, Science; Section IV, Word Attack, Part 1, Oral, Part 2, Silent; *Lower Level,* grades 4-6. Comprehension, Word Attack; Vocabulary and rate. Section IV, Word attack, oral, for individual administration. Forms A & B. 1952.

3. *Durrell Analysis of Reading Difficulty,* by Donald D. Durrell. Yonkers-on-Hudson, New York: World Book Co., 1956. For Grades I-VI.

4. *Gates Reading Diagnostic Tests,* by Arthur I. Gates, New York: Bureau of Publications, Teachers College, Columbia University, 1962. For grades 1 to 8. (Associative Learning Test.)

5. *Gates Basic Reading Tests,* by Arthur I. Gates, New York: Bureau of Publications, Teachers College, Columbia University, 1958. Three forms for last half of grade 3 to 8. Five tests include: Reading to Appreciate General Significance, Reading to Understand Precise Directions, Reading to Note Details, Reading Vocabulary, Level of Comprehension.

6. *Group Diagnostic Reading Aptitude and Achievement Tests,* by Marion Monroe and Eva Edith Sherman. Pittsburgh, Pa.: C. H. Nevins Printing Co., 1939. For ages 3-9 years.

7. *Scholastic Tests, Diagnostic Reading,* by Ruth Colestock, R. Gawkoski, and Oliver P. Anderhalter. Chicago, Illinois: Scholastic Testing Service, Inc., 1960. Primary, for grades 1-3; Elementary for grades 4-6; Advanced for grades 7-8.

8. *Silent Reading Diagnostic Tests,* by Guy L. Bond, Theodore Clymer, and Cyril J. Holt. Chicago: Lyons and Carnahan, 1955. One form, grades 3 to 8. Eleven tests include: Test 1. Recognition of Words in Isolation; Test 2. Recognition of Words in Context; Test 3. Recognition of Reversible Words; Test 4. Locating Elements in Context; Test 5. Syllabication; Test 6. Locating Root Words; Test 7. Word Elements; Test 8. Beginning Sounds; Test 9. Rhyming Sounds; Test 10. Letter Sounds; Test 11. Word Synthesis.

For Vocabulary

1. *Roswell-Chall Diagnostic Reading Test,* by Florence G. Roswell and Jeanne Chall. New York: Essay Press, P. O. Box 5, Planetarium Station, New York 24, New York, 1959. For word recognition and word analysis skills.

2. *McCullough Word Analysis Test,* 1963. Ginn and Co., grades 4 through college.

For Auditory Discrimination

1. *Wepman Auditory Discrimination Test,* by Joseph Wepman. Chicago: University of Chicago, Department of Psychology. 1958.

Oral and Readiness Reading Tests

1. *Gilmore Oral Reading Test,* by John V. Gilmore, Yonkers-on-Hudson, New York: World Book Co., 1952. For grades 1-8. Two forms measure accuracy of oral reading, comprehension, and rate.

2. *Lee-Clark Reading Readiness Test,* by J. M. Lee and D. M. Clark, Los Angeles, California: Test Bureau, 1963. Includes four tests of visual discrimination of letter symbols.

3. *Gates Reading Readiness Tests,* by Arthur I. Gates, New York: Bureau of Publications, Teachers College, Columbia University, 1942. Grade 1.

4. *Reading Aptitude Tests,* by Marion Monroe. Boston: Houghton Mifflin Co., 1939. Grades 3-9.

Intelligence Tests

1. *California Test of Mental Maturity,* Elizabeth T. Sullivan, Willis W. Clark, and Ernest W. Tiegs. Los Angeles: California Test Bureau, 1963. Forms 4-6, 7-9, 9-12, 12-16, Adults.

2. *Henmon-Nelson Tests of Mental Ability,* V. A. C. Henmon and M. J. Nelson. Boston: Houghton Mifflin Co., 1961. Grades 3-6, 6-9, 9-12, 13-17.

3. *Kuhlmann-Anderson Intelligence Tests,* F. Kuhlmann and R. G. Anderson. Princeton, New Jersey: Personnel Press, Inc., 1963. K-1-2, 3 & 4, 4 & 5, 5-7, 7-9, 9-12.

4. *Lorge-Thorndike Intelligence Tests,* Irving Lorge and Robert L. Thorndike. Houghton Mifflin Co., 1962. 1-2 & 3, 4-6, 7-9.

5. *Otis Quick-Scoring Mental Ability Tests,* Arthur S. Otis: World Book Co., 1962. 1½-4, 4-9, 9-16.

6. *Peabody Picture Vocabulary Test.* American Guidance Service, Inc., 720 Washington Ave., S. E. Minneapolis, Minn., 1959. Individual, Forms A and B. Ages 2-18.

7. *Revised Stanford-Binet Scale,* Lewis M. Terman and Maud A. Merrill. Boston: Houghton Mifflin Co., 1960. Ages 2 and over, Form L & M.

8. *Wechsler-Bellevue Intelligence Scale,* David Wechsler. New York: Psychological Corporation, 1949. Ages 5-15.

Note

Buros, Oscar K. (Editor) *The Sixth Mental Measurements Yearbook,* Highland Park, New Jersey, 1965.

This book assists users in all subjects and at all grade levels. On reading it gives comprehensive and up-to-date information on all recent tests. For a list of these, see "Achievement Batteries," p. 1278 and "Reading," p. 1287. For reviews of the tests see pp. 721-799.

Austin, M. C. Bush, L., and Huebner, M. H., *Reading Evaluation.* Ronald Press Co., N. Y. 10, 1961.

Presents specific tests for a variety of reading levels and areas of need.

APPENDIX B

BASAL READING SERIES AND ADDITIONAL READING MATERIALS

Grade	*Price*	*No. of Copies*	*Title Publisher*	*Copyright Date*
1-8	49.58	2 sets	Shelton Basic Reading Series (Allyn)	1957-58 or latest edition
1-6	36.32	2 sets	Betts Basic Readers (American)	1963 or latest edition
1-8	36.02	2 sets	Golden Rule Readers (American)	1961, 62 or latest edition
7-8	66.80	10 copies at each level	The Mastery of Reading Series (American)	1961 or latest edition
7-8	67.90	10 copies at each level	World of Literature Series (American)	1963 or latest edition
4-8	77.92	6 copies at each level	The Ginn Basic Readers (Ginn)	1961 or latest edition
7-8	72.40	10 copies at each level	Companion Series: Adventures in Literature (Harcourt)	1962 or latest edition
1-6	48.94	2 sets	The Alice and Jerry Series (Harper)	1957 or latest edition
1-6	85.76	4 copies at each level	*Reading for Interest Series (Heath)	1957 or latest edition
1-6	75.24	4 copies at each level	Easy Growth and Reading Series (Holt)	1965 or latest edition
7-8	58.00	10 copies at each level	Holt Developmental Reading Program (Holt) Let's Read Book 1	1962 or latest edition
7-9	89.10	10 copies at each level	*Holt Developmental Reading Program (Holt) Let's Read Book 2	1962 or latest edition
1-6	46.22	2 sets	Winston Basic Readers (Com. Prog.) Holt, 1957	1960 or latest edition

*The interest level of these entries is higher than the grade level of the skills required to read them. For example, they may contain material which appeals to most eighth-graders but which requires only fourth or fifth grade skills to read.

Grade	*Price*	*No. of Copies*	*Title Publisher*	*Copyright Date*
	76.52	2 sets	Developmental Series (Lyons)	1962 or latest edition
7-8	57.20	10 copies of each, Book 1 and 2	MacMillan Reading Program (MacMillan) Advanced Skills in Reading Book 1 and 2	1962 or latest edition
4, 7-8	142.70	10 copies at each level	The Basic Reader (Scott)	1962
1-6	33.34	2 sets	Crabtree-Cantree Readers (University Publishers) 1957	Latest edition
1-3	32.56	2 sets	•Dan Frontier Series (Benefic Press)	Latest edition
1-6	26.78	2 sets	Best of Children's Literature series (Bobbs)	Latest edition
1-5	38.26	2 sets	Beginning to Read Series (Follett)	Latest edition
2	42.48	2 copies of each title	Basic Vocabulary Books (Garrad)	Latest edition
	60.85	2 sets of each level	•Pleasure Reading Series (Garrad)	Latest edition
1-6	31.40	2 sets	•Ginn Enrichment Series (Ginn)	Latest edition
4-6	8.15	3 sets	The Ginn Book Length Series (Ginn)	Latest edition
1-3	54.70	2 sets at each level	•I Can Read Series (Harper)	Latest edition
7-9	11.04	4 copies at each level	Myths and Folk Tales Around the World (Globe)	1963
3, 4-8	64.60	2 copies at each level	•American Adventures Series (Harper)	Latest edition
	9.70	2 sets	Read Together Poems Choral Reading (Harper)	Latest edition
1-6	31.42	2 sets	The Wonder Story Books (Harper)	1962 Latest edition

Grade	*Price*	*No. of Copies*	*Title Publisher*	*Copyright Date*
4-6	24.21	3 sets	•Reading Caravan Series (Heath)	1964
6-12	20.52	3 copies at each level	Teenage Series (Heath)	1959
7-9	20.52	3 copies at each level books 1-2	Reading Roundup Series (Heath)	1958
8-12	43.44	3 copies at each level	•Teenage Tales Series (Heath)	1956-62
1-6	24.64	2 sets	Gateways to Reading Treasures (Laidlaw)	1960-63
1-8	37.48	2 sets	Laidlaw Reading Series (Laidlaw)	1955
1-6	27.20	2 sets	•Time to Read Series (Lippincott)	1953-54
7-12	12.00	4 copies	•A Jesse Stuart Reader (McGraw-Hill)	1963
1-6	26.48	2 sets	Treasure of Literature Series (C. Merrill)	Latest edition
7-8	23.28	3 copies at each level	•America Reads Series (Scott)	1963
7-12	16.35	3 copies at each level	•Reading for Pleasure Series (Scott)	1963
1-3	12.62	2 copies at each level	Reading Independence (Scott)	Latest edition
7-9	6.93	3 copies at each level	•Simplified Classics and Other Easy Reading Series (Scott) People to Remember	1960
4-8	50.34	3 copies at each level	•Deep Sea Adventures Series (H. Wagner)	1959-62
1-3	30.51	3 copies at each level	•The Jim Forest Series (H. Wagner)	1959
3	20.76	3 copies at each level	•The Morgan Bay Mysteries (H. Wagner)	1962

APPENDIX C

SKILLS — GRADE LEVEL CHART

GRADE 1

Phonetic analysis

rhyme	Auditory-visual perception of rhyme
l t b s w h j n d g p r m	Initial consonants (auditory-visual)
ch, sh, th	Consonant symbols
s n p t d m n	Final consonants (auditory-visual)
	Substitution of initial and final consonants

Understandings developed:

Consonants in words may be silent
Two-letter consonants may represent one sound.

Structural analysis

Recognition or inflected forms made by adding *s, 'd, d, ed,* and *ing* to known root words

Recognition of compound words made up of two known root words

Recognition of contractions

GRADE 2

Phonetic analysis

l with b c f g p s r with b c d f g t s with t l m n p w	Blending of two consonant sounds
scr spr str squ	Blending of three consonant sounds
	Audio-visual perception of vowels
i	(it, ice, bird) short, long, followed by *r*
a	(at, ate, car, ball, care, saw) short, long, followed by *r, l,* or *w*
e	(met, me, her) short, long, followed by *r*
o	(hot, go, or) short, long, followed by *r*
u	(up, use, hurt, sure) short, long, followed by *r*
ow	(crow, crowd)
ou	(pound)
oo	(cook, toot)
oi	(oil)
oy	(boy)
aw	(saw)
ew	(grew)

Understandings developed

ball, rain night, knit	Some letters may be silent.
hole, while	Silent consonant letters may be meaning clues.
slide, rain	Silent vowels are usually visual clues to vowel sounds.

Structural analysis

	Recognizing words formed by adding *n, en, er, est* with no change in root words
dig, digging cry, cried bit, bitting	Recognizing words formed by doubling final consonant, dropping final *e*, changing *y* to *i* before adding an ending or suffix
windy, sunny baker	Recognizing words formed by adding *y, ly,* or *er* of agent
hop, hopped hopping sun, sunny	Identifying root words in derived or inflected forms

Developing dictionary skills

Understanding that a printed word may represent more than one meaning

Use context to determine appropriate meaning

Recognizing alphabetical sequence

Identifying root words

GRADE 3

Phonetic analysis, including

Relation of vowel and syllable

Word or part of a word in which we hear one vowel sound is called a syllable

Visual-auditory perception of syllable

Awareness of syllabic division aids in determining vowel sounds in a word of more than one syllable

Auditory-visual awareness of unstressed vowel sounds (schwa) in unaccented syllables

Accent affects vowel sounds in syllables

Principles determining syllabic divisions

lad der	If the first vowel sound in a word is followed by two consonants, the first syllable usually ends with the first of the two consonants.

la dy	If the first vowel sound in a word is followed by a single consonant, that consonant usually begins the second syllable.
la dle	If the last syllable of a word ends in *le* preceded by a consonant, that consonant usually begins the last syllable.
	Visual clues to syllabication
leath er	The syllables in a word usually do not break between consonant blends or special two-letter consonant symbols.
ev en	The letter *v* may go with the vowel that precedes it or follows it.
c in cat, city g in go, gem s in us, use a in cat, ate, ball, car, care	One letter may stand for more than one sound. (variability)
cat, mice, oil, red, keep, miss, boy, said bread, clown, wear, fool, proud, stare, rule, drew	Different letters may represent the same sound.
	Principles determining vowel sounds

GRADE 4

Phonetic analysis, including

Syllabication

Visual clues to vowel sounds or syllabication that also function as clues to accent in words of more than one syllable.

rib'bon mut'ter	Two like consonants following the first vowel are a clue to an accented first syllable and to a short vowel sound in that syllable.
jack'et chick'en	The letter *ck* following a single vowel letter are a clue to an accented syllable and to a short vowel sound in that syllable.
com'plain' a muse' de cide'	Two vowel letters together — or two vowel letters one of which is final *e* — in the last syllable of a word are usually a clue to an accented final syllable and to a long sound in the syllable.
ar range' ad vice' de cide' no'tice — mes'sage	In two syllable words ending in final *e* preceded by a, c, or a, g, the final *e* is a clue to soft sound of *c*, or *g*, but not necessarily a clue to accent or vowel sound.

ad mit'ted for bid'den	Two like consonants before the ending in an inflected word are a clue to an accented final syllable in the root word and to a short vowel sound in that syllable unless the vowel sound is controlled by *r*.
re mem'bered	A single consonant following a single vowel before the ending is usually a clue to schwa sound in unaccented syllable, or it may be a clue to a long vowel sound and a dropped *e* in an accented final syllable of the root word.
	Accent
com'i cal	In words of three or more syllables, one of the first two syllables is accented.
pi'o neer'	In longer words where there is a secondary accent as well as a primary accent, the secondary accent often falls on the first or second syllable.
	Structural analysis
feared fearful disagree	Root words are meaning units in inflected or derived forms.
sadly speechless	Prefixes and suffixes are meaning units.
	Dictionary
	There are consonant and vowel sounds in the alphabet. Meanings may affect pronunciation.
	In dictionary pronunciations, a consonant letter symbol stands for its most common sound.
	In dictionary pronunciation, each symbol stands for a sound.

4th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Review initial consonants	Recalling verb endings (s, es, ed, ing)	Alphabetizing: a. to the 2nd letter b. to the 3rd letter c. to the 4th, 5th, and 6th letter
Reviewing difference in the sounds of *s*	Learning the ending "th" and number words	Syllabications: a. reviewing the effect of structure or vowel sound b. open and closed syllables c. accent
Reviewing hard and soft *c* and *g*	Perceiving the suffix *ness*	Reviewing clues for dividing words into syllables
Review initial consonant blends	Reviewing suffixes ful, less, ly, y	Recalling accents
Reviewing the meaning of vowels, consonants, phonograms	Reviewing various inflectional endings (ed, ing) a. dropping silent *e* b. doubling final consonant	Dividing words with prefixes and suffixes
Recalling long and short vowels a. medial vowel lengthened by *e* b. *y* as a vowel and a consonant	Recalling plural forms (s, es, ies)	Attaching new words with prefixes and suffixes
Reviewing vowel digraph clue: a. seeing exceptions — aw, ie, ei	Reviewing the change of *y* to *i* in rules before an ending	Dividing words ending in *le*
b. digraphs followed by *r*	Perceiving prefix *dis*	Dividing words with vowel digraphs
Recalling vowels followed by *r*	Review *ex, re, un*	Dividing words with consonant digraphs
Recalling 3 main sounds of vowels (long, short, followed by *r*)	Perceiving the suffix *ment*	Dividing compounds into syllables
Recalling two sounds of *ow*	Recalling *ness, full, less, by*	
Recalling vowel digraphs and discussing exception	Recalling pronunciation of words ending in *ed*	
Recognizing silent letters in consonant digraphs	Seeing irregular past tenses of verbs	

4th Grade

PHONETIC ANALYSIS

Perceiving variant sounds of *gh*

Perceiving *ph* as *f*

Learning the diacritical marks for long and short vowels

Recalling the sound of *a* before *e, w*

Recognizing long and short vowels in polysyllabic words

Noting the effect of accent on vowel sounds

Reviewing the sounds of *ea;* recalling vowel digraphs; learning respellings for vowel digraphs

Perceiving variance in the sound of the consonant digraphs th, ch, ph

Syllabications of words with consonant digraphs

Reviewing sounds of *o*

Reviewing sounds of *a* and seeing exceptions

Reviewing *qu*

STRUCTURAL ANALYSIS

Reviewing comparative, and superlative

Recognizing the suffix *en* in verbs and adjectives

Perceiving the suffix *ish* and *an*

Perceiving the meaning of *im* and *in*

Recognizing syllabic divisions of affixed forms *a, be, re, ex, un, dis, im, in*

Perceiving *de* and *con* as syllabic units

Recalling prefixes and suffixes, finding root words

Recognizing prefixes

Seeing proper adjectives made from nouns *an, ish, ese*

Learning about the suffix *ish* when used with a root word

Recognizing the suffix *able*

Locating dictionary entries. Reviewing that a dictionary entry word is always a root word without inflectional endings

DICTIONARY SKILLS

Recalling the syllabication of consonant blends

Attacking new words, marking accented syllables

Syllabication and accent
a. recalling the effect of accent on vowel sound
b. open and closed syllables
c. reviewing words ending in *le* or *el*
d. noting vowel sounds in unaccented syllables

Learning to use the glossary

Determining the general location of a word in the glossary

Learning to use guide words

Using glossary for word meaning

Learning the diacritical marks for long and short vowels

Perceiving the circumflex *a* in stare, air, and bear

Introducing the dictionary

4th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Using phonograms to attack new words Recalling silent *h* and other silent consonants	Recalling prefixes meaning *not, un, im, in, dis*	Recalling *a*
Recognizing the two sounds of *oo*	Finding root words in suffix forms	Introducing two dot a as in farm
Recognizing the different sounds of *w*	Observing the directional suffix *ern*	Introducing circumflex *o*
Reviewing *ch* in words attaching new words with *ch, sh,* and *wh*	Learning the meaning of the suffix word	Learning about circumflex *w*
Observing two spellings of the *aw* diphthong		Observing *w*
Recognizing words ending *dge*		Recognizing pronunciation symbols for four sounds of *a*, late, am, farm, care
		Seeing the respelling of *o* in prove
		Reviewing pronunciation symbols for vowels
		Recalling the diacritical markings of oo and oow, as oo, ew, as oo
		Testing the ability to use the pronunciation key

5th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Recalling consonant blends	Noting root words in the glossary	Glossary:
Using phonetic elements such as consonant blends, phonograms, consonant and vowel digraphs in word attack	Recognizing root words in derived forms; observing changes in spelling of inflectional form; recalling rules relating to changes in spelling of words when ending is added	a. reviewing use of glossary b. finding new vocabulary words in glossary
Recognizing silent consonants in words; naming words in which silent consonants appear	Recalling and using seven syllabication principles	Dictionary usage: arranging words in alphabetical order to the fourth letter; using the dictionary to check silent consonants in respelling of words
Reviewing the long and short vowels; applying rules governing pronunciation of words ending in *e* preceded by single vowel; reviewing short medial sounds	Reviewing prefixes *um, dis, im, in, re*	Glossary: using pronunciation key of glossary for diacritical marks indicating long and short vowel sounds
Recalling vowel digraphs and diphthongs *ae, oo, au*	Recalling the prefixes *a, be, de, ex, con* as beginning syllables	Dictionary and glossary usage: recalling the use of guide words; their placement, purpose and value
Reviewing other vowel combinations in words	Reviewing the suffixes *ment, ful, y, ness, less*	Syllabication: using syllabication of prefixes as guide to pronunciation
Perceiving the sound of *e* in *er* (maker)	Reviewing structural changes *y* makes in derived forms of words; finding root words in derived forms in which *y* changes to *i*	Dictionary usage: checking dictionary symbol for *e* in *er* as in letter
Recalling the uses of y as a consonant and vowel	Recognizing the *tion* suffixes perceiving the meaning the *tion* suffixes give to words	Syllabication: recognizing auditory effect of accent on syllables, recognizing primary accent in words of several syllables
Reviewing three sounds of the digraph *ch*	Noting how words end in *ed* are divided into syllables	

5th Grade

PHONETIC ANALYSIS

Recognizing two-dot *a*

Noting exceptions in the sound of *a* followed by *r*, recognizing circumflex *a* (a) recalling that *ai* in air and *ae* in wear have sound of circumflex *a*

Recalling *qu* as *kw;* observing *qu* as *k*

Pronouncing circumflex *o* and *u*

Noting the similarity in the pronunciations of *ir, er, or,* and *ur*

Reviewing the sounds of circumflex *a* in care and circumflex *o* in horse

Identifying changing *w*, observing *u* as *oo*

Recognizing the different sounds of *ch* like *ch, sh, kw,* in new words of the story

Recalling and making vowels that are followed by *r*

Observing silent *u* in *gu;* noting the sound of *g* hard or soft

Reviewing the digraph *ph*

STRUCTURAL ANALYSIS

Learning to divide solid and hyphenated compounds at end of line

Reviewing the ending syllables *or* and *er* meaning agent

Recalling the *tion* suffixes and the dictionary respellings of the words in which they appear; checking the pronunciation of words in which *tion* suffixes appear

Perceiving the suffix *al*

Recalling the suffixes *ish, ward, ment*

Reviewing hyphenated compound words discussing use of hyphen in words at end of a line of text

Learning the use meaning of the prefix *tele* in words

Recalling syllabic division of compound and hyphenated words

Learning the meaning and use of the suffix *ous*

DICTIONARY SKILLS

Dictionary usage using alphabetical order, checking respelling of words ending in *y*

Dictionary usage checking the respelling of words in which *ch* appears

Syllabication and accent: using accent marks as guide to pronunciation and syllabication noting effect of accent on vowel sound

Glossary: learning to recognize circumflex *a* in the key word care

Accent: Noting the effect of shifting accent on meaning and pronunciation

Glossary and Dictionary: learning to recognize circumflex *o* and *u*, checking words in which circumflex *o* and *u* appear

Glossary and dictionary — observing respelling of words in which vowels *e, i, o* sound like circumflex u checking definition of words ending in *er*

5th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Learning to recognize as one speech sound the digraphs *ph, th, ch, sh* and *ck*	Recalling rules relating the changes made in some root words when adding a suffix	Syllabication and accent learning how accent acts as guide to pronunciation
Recalling the different sounds of *ou*	Reviewing the changes made in words by the inflectional endings *es, ed, ing, er, est*	Glossary and dictionary observing how unaccented vowels are marked,
Recognizing the variant sounds of phonograms	Reviewing the rules governing the spelling of plural forms; devising a rule for words that do not form plurals in the regular way	observing key words for the half-long symbol ( ) in the glossary
Reviewing the sound of *a* influenced by *l* and *w*	Learning about the suffix *ship*	Dictionary checking words in which various sounds appear
Perceiving variations in the sound of *a* after *w*	Recognizing the root words in derived forms adding prefixes and suffixes to root words	Key word — learning the correct diacritical marks for vowels followed by *r*
Reviewing the variant sounds of *o*	Observing the suffixes *ence* and *ent* Observing effect of accent on words of more than one syllable ending in *er, ar, or, el,* and *il*	Syllabication — learning how digraph ph, th, ch, sh, and ck are treated in syllabication
Observing *o* in soft	Learning to recognize and use the suffix *ist,* recalling effect of *er* and *or* on words	Dictionary usage: observing dictionary respelling of *ou,* reviewing the syllabication and respelling of words ending in *le*
Recognizing silent consonants in *rn, wr, gn*	Recognizing the different sounds of *ed* as a final syllable	Dictionary usage: checking the dictionary symbols for *a* before *l* and *w*
Learning to recognize and pronounce muted vowels in the final unaccented syllables *el, al, le;* learning the use of the apostrophe in these final unaccented syllables		Syllabication: recalling the rule for dividing compound words into syllables
Recalling the various sounds of *ou* as in out, double, could, bought, boulder, soup		

5th Grade

PHONETIC ANALYSIS

Reviewing the consonant digraph *ck* and learning that it is usually treated as a single consonant when dividing words

Recognizing two sounds of *s*, observing several spellings of the voiceless sound of *s*

Perceiving *i* as the consonant *y* in words

Noting the symbols used to indicate long and short half-long vowels

Observing the effect of accent on the pronunciation of words in which there are vowels before *r* in final syllables, noting the diacritical mark for *e* in letter (e)

Recalling the half-long sounds of the vowels *a, e, o, u*

Observing that *ci* and *ti* sound like the consonant digraph *sh* in some words, reviewing short vowel sounds in unaccented syllables

Observing the sound that *tu* makes in words reviewing pronunciation symbols

STRUCTURAL ANALYSIS

Learning the suffix *hood*, recalling *ship* and other known suffixes

Finding root words in derived forms

DICTIONARY SKILLS

Accent: observing the use of accent in compound words

Diacritical marks — observing the mark for short-circumflex *o* ( )

Syllabication and accent — observing accent in words with prefixes

Dictionary usage — checking respelling of words with *er, ey,* and *ea*

Accent — observing that the stress in the inflected forms of words is on the root word

Syllabication and accent — learning how to divide and accent words ending in *ck* recalling the effect of *x* on the syllabication and accent words

Syllabication and accent — applying rules for governing stress in words

Dictionary usage, perceiving respellings of *i* as consonant *u*, learning that some words have more than one respelling and more than one pronunciation

5th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Recalling the sounds of voiced and voiceless *th*, reviewing consonant digraphs *wh*, *ph*, and *ck*		Dictionary usage — checking the respelling of words in which *s* appears, checking the spelling of plural forms
Recognizing the effect of shifting accent on the pronunciation of vowel sounds in words		Accent — recognizing primary and secondary accents
Recalling the unaccented short sounds of the vowels *a*, *e*, *i*, *o*, and *u*		Dictionary usage — recognizing unstressed vowels in respelling
Learning the suffix *hood*, recalling *ship* and other known suffixes		Accent: learning that the placement of accent changes the meaning and use of a word
Finding root words in derived forms		Dictionary usage — comparing the pronunciation keys in two dictionaries
		Syllabication and accent — reviewing the effect of accent on vowel sounds observing effect of accent in words of more than one syllable
		Dictionary usage — checking respelling and pronunciation of words beginning with *a*, *be*, *de*, *re*, reviewing the half-long symbol
		Glossary — checking definition and syllabication of anti-gravity

5th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
		Dictionary usage — checking meanings of synonyms in the dictionary, finding key word for *tu*
		Glossary — verifying choice of respelling by using the glossary
		Dictionary usage — noting how voiced and voiceless *th* are represented in the pronunciation key, checking the respelling of *wh* as *hw* in some words
		Comparing and interpreting pronunciation symbols in three dictionaries
		Finding the key words for the short sounds of the vowel, checking respelling in the dictionary

6th Grade

PHONETIC ANALYSIS

Reviewing single consonants, silent consonants, varient pronunciations of *c* and *g*, recalling consonant blends and digraphs

Reviewing principle governing the pronunciation of long and short vowels

Reviewing rule for pronouncing vowel digraphs

Reviewing diphthongs *oi, ov, ou, ow*

Reviewing *a, a, o, u, e, o, tu, e* in here

Marking vowel sounds with the correct diacritical marks

Recalling that one-syllable word is one in which only one vowel is heard

Reviewing the vowel sounds in unaccented syllables

Reviewing the pronunciation of vowel digraphs

Discussing symbols for unaccented vowels observing italicized one dot *a* observing the sounds of *o* in accented and unaccented syllables

STRUCTURAL ANALYSIS

Reviewing and listing rules for syllabication

Reviewing rules for accent

Perceiving the effect of accent on vowel sounds

Using compound words

Reviewing inflectional endings and rules for adding *ed* and *ing*

Observing *ed* pronounced as *t* in some words

Using prefixes *dis, im, un, in*

Learning the meaning and use of the suffix *ling*

Reviewing words in which the ending ed is not a separate syllable

Receiving the suffixes *tion, sion, ion,* finding root words in words ending with *tion* suffixes

Recognizing root words in affixed forms

Recalling that dictionary entry words are usually in the bare or root forms

DICTIONARY SKILLS

Dictionary and glossary usage reviewing the organization of the glossary, locating entries, alphabetizing, noting guide words, dividing the dictionary into quarters to facilitate locating words quickly; perceiving similarities between the dictionary and the glossary

Checking syllabication recalling diacritical marks

Dictionary and glossary usage checking placement of accent in work

Dictionary usage — finding prefix meanings discussing dictionary helps for syllabication in reading and spelling

Dictionary and glossary usage comparing dictionary and glossary definition

Dictionary usage — comparing symbols for unaccented vowels in three dictionaries, recalling the schwa

6th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
Reviewing phonetic analysis rules	Reviewing the suffix *ly*	Dictionary usage — checking accentuation and prefix meanings
Applying vowel rules to new words	Reviewing the suffixes *able* and *ible*	Glossary usage — alphabetizing using guide words interpreting glossary meanings and diacritical markings
Observing phonetic elements in proper names	Reviewing compound words, solid and hyphenated	Glossary usage — checking the meaning of technical terms in the glossary
Observing vowel differences in words	Locating the suffixes *al, ic, ical, age,* and *ive* in the dictionary and perceiving their several meanings	Dictionary usage — checking syllabication, accentuation, and phonetic respellings in the dictionary
Reviewing consonant digraphs and blends	Recognizing the prefixes *con* and *com*	Dictionary usage — using the dictionary to determine placement of accent
Reviewing the various sounds of *a*	Dividing words into syllables and placing primary and secondary accents	Glossary usage — using the glossary to pronounce proper names, interpreting respells
Reviewing the various sounds of *u*	Reviewing accent in affixed forms	Dictionary usage — interpreting respellings of words
Reviewing unaccented vowels followed by *r*	Reviewing structural analysis rules	Using the dictionary to check syllabication of words with consonant blends and digraphs
Recognizing several spellings of circumflex *o*	Reviewing prefixes *anti, non*	
Recalling pronunciation of unaccented syllables	Recognizing suffixes *an, ish, ese, al, any* and their effects on the meaning of root words	
	Recognizing common Latin roots	

6th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
	Reviewing the suffix *ic*, recalling, suffixes *er, or, ist, een*	Using the dictionary to verify pronunciation of vowels
	Recognizing prefixes *inter, trans, tele*	Discussing dictionary respellings of words ending in *le*
	Recognizing shifting accent, reviewing the placement of accent, observing changes in accent in words derived from the same root	Discussing the meaning of the abbreviation *n* and *v*
	Recalling suffixes *ive, ize*	Discussing derivation abbreviations accompanying entry words
	Recognizing fare — as a prefix	Noting two pronunciations and two spellings for some entry words
	Using syllabication and accents on aids in reading	Checking accuracy of context clues in the glossary dictionary
	Reviewing the uses of the apostrophe	Interpreting glossary respelling of proper names
	Recalling the rule governing the syllabication of consonant digraphs and blends	
	Reviewing the syllabication, pronunciation and accent of words ending in *le*	
	Noting the effect of accent on word meaning	

6th Grade

PHONETIC ANALYSIS	STRUCTURAL ANALYSIS	DICTIONARY SKILLS
	Observing structural changes in words when adding *ant, ance, ent,* and *ence* Comparing combining forms and prefixes Using suffixes and root words Making new words from the same root	

APPENDIX D

SPECIAL READING SKILLS FOR EACH ACADEMIC AREA

The skills listed below were found to be necessary to the understanding of several leading textbooks, elementary and secondary, in each field. The format suggested in the section, "The Lesson Plan," fits the teaching of these skills. Identifying and defining them with students and requiring students to apply them to the regular texts are the essential steps. Each succeeding exercise should call for application in a more complex situation. This *functional repetition* strengthens the student's command of the skills and helps him form the habit of using them.

The skills overlap; that is, they are not mutually exclusive. Nor is the list exhaustive. The main purpose of this Appendix is to alert teachers to the fact that these special skills deserve attention. Conferences with teachers in each area should reveal more skills.

SCIENCE:

1. Classifying facts
2. Explaining processes
3. Distinguishing the steps in a process
4. Understanding descriptions of experiments
5. Following the directions for experiments
6. Organizing factual detail
7. Grasping cause and effect relationships
8. Drawing inferences from complex groups of facts
9. Interpreting graphs, diagrams, and pictures
10. Identifying and stating problems precisely
11. Identifying the information needed to solve a problem
12. Reviewing difficult passages
13. Memorizing important definitions

SOCIAL STUDIES:

14. Reading maps
    a. to note topographical features
    b. to trace routes
    c. to use mileage scales
    d. to interpret climate and vegetation symbols
    e. to relate geographical conditions to historical phenomena
15. Understanding the sequence of historical events
16. Identifying significant dates
17. Using boldface headings to preview and review
18. Understanding multiple causes
19. Identifying trends from details
20. Taking notes, outlining, and summarizing
21. Identifying significant names, phases, and issues

MATHEMATICS:

22. Understanding complex directions
23. Reading problems
    a. to understand the question
    b. to visualize the situation
    c. to select the necessary information
    d. to choose the correct computational process
24. Drawing diagrams to scale and interpreting diagrams
25. Reading graphs

LITERATURE:

26. Visualizing settings, characters, and other objects of description
27. Characterizing styles
28. Identifying turning points or other significant events
29. Inferring qualities of characters from their actions
30. Substantiating interpretations
31. Comparing characters
32. Relating events and motives to one's own experience
33. Identifying motives and themes

APPENDIX E

PACKAGED MATERIALS

The Literature Sampler, Jr. Edition
Learning Materials, Inc.
411 E. Illinois Street
Chicago, Illinois
(Write to publisher for price.)

*The Literature Sampler provides the opportunity to individualize the reading program. It is composed of 144 book previews that are related to various areas and classified for immediate selection.

Each review is accompanied by a reading aid card that checks comprehension and a discussion card which substantiates answers chosen. It encourages wide reading because of the high interest, humor and appropriate illustrations. Provision should be made to make the complete literary works represented by the samplers available to the students.

SRA Reading Laboratory 111b
259 East Eric Street
Chicago 11, Illinois
(Price) $54.50

The Reading Laboratory Series individualizes your teaching program so that all students can develop and better the following reading skills: Vocabulary, Comprehension, Word-attack, Listening and Listening-notetaking. It also tends to develop speed and concentration.

Each pupil begins at his functional level of reading and moves at his own rate. One laboratory makes provisions for the wide-range of individual differences within a classroom.

SRA Reading for Understanding — General
259 East Eric Street
Chicago 11, Illinois
(Price) $29.50

This self-teaching program develops the student's ability to grasp the full-meaning of what he reads by teaching him to analyze a sequence of ideas and make logical conclusions. It covers areas of politics, education, history, science, etc. The materials are simple and flexible in methods. A student progresses to successive levels as he demonstrates proficiency.

SRA Reading for Understanding — Junior
259 East Eric Street
Chicago 11, Illinois
(Price) $29.50

Reading for Understanding consists of practice materials arranged for a

---

*All descriptions of packaged materials are taken from literature published by the manufacturer.

completely individualized program of instruction. It is intended for children who have acquired some skill in word recognition, work attack, and reading as taught in the primary grades. It is not designed to teach basic reading skills. It is based on the assumption that continued practice produces skill.

SRA Reading Laboratory — Elem. Edition
259 East Eric Street
Chicago 11, Illinois
(Price) $52.50

This laboratory offers a wider spread of reading levels and should be used where most generalized instruction is suitable.

Spelling Laboratory 111a
259 East Eric Street
Chicago 11, Illinois
(Price) $54.50

The Spelling Word Power Laboratory is available in sequence for grades five, six and seven. It enables each student to discover his problems and to proceed on his own to learn as much as he can as fast as he can. The student checks his own achievement and plans his next step in the learning process. It develops genuine self-motivation and immediate feedback or reinforcement of the results.

Each child can start where he is in spelling achievement and move ahead as fast and as far as his learning rate and capacity permit.

SRA Basic Composition Series 111
259 East Eric Street
Chicago 11, Illinois
(Price) $39.50

This unique program provides a structured sequence of lessons and writing assignments that allows students to advance at their own rate as they learn one skill at a time. The program entails little paperwork for the teacher.

The series teaches narration, description and introductory exposition in a three-part program.

The materials and illustrations are highly diversified to interest *all* regardless of social or economic backgrounds.

Individual learning abilities are accommodated by the track system which directs students to Supplementary Lessons whenever it is obvious that further study is needed.

SRA Pilot Library 111b
259 East Eric Street
Chicago 11, Illinois
(Price) $49.50

This laboratory contains 47 excerpts from the best of children's literature. They are of intrinsic literary value, high interest and curriculum-oriented. It

serves to bridge the gap between relatively short materials used in reading development and the complete book which is the ultimate goal of every reading program. The teacher may use it as introduction to originals. The Pilot Books are not adaptations but are written in the vernacular of the originals.

The range of topics covered is very wide, including drama, humor, fiction, non-fiction, biography, poetry, fantasy, adventure, science fiction and political, physical, and social science.

SRA Words Material
259 East Eric Street
Chicago 11, Illinois
(Price) $2.15

Words is a sequential, self-teaching linear program for vocabulary development. The student may follow a slow track in which he completes every frame, or a fast track, in which he skips certain frames.

Allowances are made for individual differences by periodically directing the student on the basis of his particular answers. He can "advance or retreat". Not only does Words develop word attack skills, it also enhances an understanding of the derivation of words.

SRA Contemporary Composition
259 East Eric Street
Chicago 11, Illinois
(Price) $495.00

Contemporary Composition is a unique visual method of teaching composition to senior high school and college students. It is exceptionally versatile and can be used as a complete course of study, or as an approach to specific problem areas in composition by use of the individual lessons and units.

The entire course covers 12 major concepts in English composition in 24 separately-bound Lesson Books which contain a prepared sequence of 510 colored transparencies.

Tactics in Reading
Scott-Foresman and Company
Chicago, Illinois
(Price) $56.00

Tactics in Reading is designed for students in secondary schools who fall below expected levels of achievement in reading. The lessons are so developed that it is easy to achieve success but sophisticated enough to foster challenge. It presents more than 102 exercises in the areas of attacking words by using context, structure and phonetic clues; reacting to imagery; following sequence, understanding sentences; drawing inferences; understanding paragraphs; and analyzing affixed words of common foreign roots.

Although Tactics is geared to use with *Vanguard,* it develops skills fundamental to all reading.

EDL Study Skills Library
Educational Development Laboratories
Huntington, New York
(Price) $56.00

The EDL Study Library offers a new approach to the teaching of essential study skills and the improvement of reading in content areas. Students learn those skills which enable them to read competently and critically: to select, understand, judge, and use the important ideas found in texts and reference books and materials.

Each student is able to work at his own rate and at his own level of need. He begins a year below his instructional level in reading. It considers the interpretation, evaluation, organization and reference areas of study skills. It has a wide range coverage of grade levels from 1-12.

Building Reading Power
Charles E. Merrill Book, Inc.
1300 Alum Creek Drive
Columbus, Ohio
(Write to publisher for price.)

Building Reading Power is designed to meet the needs of students who are reading at or about the fifth grade level. It may also be used with junior high school students who need remedial work in reading. It presents 15 sequential programmed units in context clues, structural analysis and comprehension skills.

Torchbearer Library 1
Harper and Row, Publishers
(Price) $59.50

The Torchbearer Library 1 is a very inclusive enrichment program. It is a great assistant for individualizing reading. The books are of high interest and low vocabulary which will enable the student to read with a high degree of success.

APPENDIX F

EQUIPMENT

Many of the pieces of equipment listed below are useful in both the "Background Experience" and "Applying the Concept" stages of a lesson, Students may use most of them individually or in small groups; thus, they are excellently suited to the grouped instruction approach, where as many as four or five different activities may go on simultaneously in the same classroom.

The purchasing stations listed are not the sole sources of these machines, only the sources from which the Advancement School has secured them. It was thought advisable to list *some* source, even at the risk of seeming to advertise certain businesses.

Machine	*Price*	*Description*	*Purchasing Station*
Language Master	200.00	The teacher uses the Language Master to record words or syllables on a strip of tape mounted on a three by nine inch card, which the student plays back, recording the sound in imitation of the teacher. The student may then compare his pronunciation with the teacher's and make the necessary corrections. Thus, the Language Master is useful in teaching oral language skills, such as the interpretation of diacritical markings.	Stone's, Inc. Raleigh, N. C.
Reading Rateometer	59.95	The Reading Rateometer is a speed reading device which rushes a cross-bar down the pages. The rate of downward movement of the cross-bar can be controlled. A chart is placed on the machine to help compute words per minute.	Tarmac A. V. Co. Asheville, N. C.
Craig Reader	169.50	The Craig Reader is an individual teaching machine that projects written material on 35 mm. single-frame filmstrips. It is designed — as a reading pacer — to develop good eye habits in reading.	Tarmac A. V. Co.

Machine	*Price*	*Description*	*Purchasing Station*
Listening Station	157.00	The Listening Station is a high quality record player with jacks for several sets of earphones. One or more students can use the Station without disturbing the remainder of the class.	Tarmac A. V. Co.
Kodak Carousel Slide Projector	99.86	A very sturdy projector, the Carousel holds eighty slides in a circular tray. The forward, reverse, and focus remote controls facilitate its use	Ball Photo Asheville, N. C.
Slide Trays	2.37ea.	in synchronization with a tape recorder. Slide-tape presentations can be as exciting, motivating, and instructive as professionally prepared films, yet any teacher may produce his own slide-tapes.	
Filmstrip Projectors			Southern School Service, Canton, N. C.
1. Standard 750C	85.00	The filmstrip projector's use is very similar to the Carousel Slide Projector's, but a great deal of fine material for reading instruction not on slides is available on filmstrips.	
2. Bell & Howell Autoload	135.00		Stone's, Inc.
3. Dukane 576-47B	144.00		Tarmac A. V. Co.
Wollensak Tape Recorder	128.00	Students may use tape recorders as they would the Language Master and to develop articulation, enunciation, and pronunciation in oral reading. An entire lesson for a class, a small group, or a student who needs individual instruction may be recorded, thus freeing the teacher for other instructional tasks.	Tarmac A. V. Co.

Machine	*Price*	*Description*	*Purchasing Station*
EDL Controlled Reader	150.00	The EDL Controlled Reader projects filmstrips at the rate selected by the operator. Filmstrips on phonetic and structural analysis — in addition to strips which are designed to develop vocabulary, speed and comprehension — are available for the Controlled Reader.	National School and Industrial Corp. Raleigh, N. C.
Perceptamatic	125.00	The Perceptamatic is designed to increase the student's span of perception and his ability to organize what he sees. The time span of exposures can be controlled.	Stanley Bowman Company Valhalla, N. Y.
Bell & Howell Motion Picture	287.50	Instructional films on various reading skills are available and should be used, but a far more exciting use of the motion picture projector is possible: dramatic and documentary films can provide students with the most compelling kind of background experience. Used in this way, motion pictures are tremendously valuable motivators.	Stone's, Inc.

For more information on these and other teaching machines, write to the purchasing stations listed above.

APPENDIX G

INTEREST INVENTORY

Name ..... Date .....
School ..... Teacher .....
Interviewer .....

1. What do you like to do when you have nothing to do? .....
   .....
2. If you could choose, what important thing would you do? .....
   .....
3. What is your favorite television program? .....
   a. How many programs do you watch every day? .....
   b. Do you do homework while watching TV? .....
4. What is your favorite comic book? .....
5. What is the best book you ever read? .....
6. What is the best book anyone ever read to you? .....
7. Have you ever gone anywhere by yourself? .....
8. How did you travel? .....
9. Name one of your best friends ..... Grade .....
10. Do you like school? ..... What is your favorite subject? .....
11. Do you know someone who is a good reader? ..... Who? .....
12. Is learning to read hard for you? .....
13. Is doing your homework easy? ..... Hard for you? .....
14. Do you want to be a better reader? .....
15. Does reading make you tired? ..... Do you like to read? .....
16. Do you have a pet? ..... What kind? ..... Do you take care of him? ..... What kind of pet do you like best? .....
17. How many children are there in your family? .....
    Would you like to change places with one of them? .....
    Which one? ..... Why? .....
18. If you were in trouble, which one of your parents would you go to for help? Father? ..... Mother? .....
19. If you needed to tell a secret to just one person in your family, who would you tell? .....
20. Have you ever made a collection? ..... What kind? .....
21. If you could go to the store and buy anything you wanted, what would you buy? First: ..... Second: .....
22. Do you become nervous when you read in class? .....
23. If you could get one wish, what would you wish for? .....
    .....

SUMMARY

Significant factors which would aid in improving this child's reading:
.....
.....
.....
.....

APPENDIX H

SAMPLE LESSON PLANS

The following lesson plans include only the first four steps. The remaining three — Applying Concepts, Assessing Progress, and Regrouping for Further Instruction — are easily envisioned and require no further explanation.

Plan A. Word Attack: Six Spelling Rules

Objectives:

1. To review diacritical markings studied in immediately previous lessons.
2. To teach the rule, "When a word begins with a short or modified vowel, two like or unlike consonants will usually follow."
3. To teach the rule, "Words ending in *e* usually drop this final *e* when a suffix beginning with a vowel is added."
4. To teach the rule, "Words ending in *e* usually retain this final *e* when a suffix beginning with a consonant is added."
5. To teach the rule, "In words including the joined vowels *i* and *e*, *i* generally precedes *e* except after *c* or when the two vowels together make the sound *a*."
6. To teach the rule, "One syllable words ending in single consonants preceded by only one short vowel usually double the last consonant before adding suffixes beginning with vowels," and additionally, "The same principle applies to multi-syllable words when the accent falls on the final syllable of the root word."
7. To teach the rule, "When one or two consonants precede a final *y*, the *y* changes to *i* when any suffix except those beginning with *i* is added."

Procedure:

1. Use diacritical markings to indicate the proper pronunciation of important vowel sounds in each word list in the "Background Experience" sections.
2. Background Experience: Write and pronounce the following words:
   effort almost inner order under
   Have the students pronounce the words, noting similarities and differences.

   Discovering a Pattern: Ask students if they noticed any similarity in the initial vowels and in the consonants that follow. If not, have the students re-examine the words, one at a time. Add further examples if necessary

   Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the following sentence: "When a word begins with a short or modified....., it usually means that two like or unlike..... will follow."

3. Background Experience: Write and pronounce the following list of words.

shine	shining
restore	restored
fine	finest
make	making

3. Background Experience, (continued): Have the students pronounce the words, noting similaries and differences.

Discovering a Pattern: Ask students if they noticed the similarity in formation of the words in the second column from those in the first. If not, have them re-examine the lists, one word at a time.

Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the blanks in the following sentence: "Words ending in..... usually..... this final..... when a suffix beginning with a..... is added."

4. Background Experience: Write and pronounce the following words.

sincere	sincerely
waste	wasteful
use	useful
amuse	amusement

Have the students pronounce the words, noting similarities and differences.

Discovering a Pattern: Ask students if they noticed the similarity in formation of the words in the second column from those in the first. If not, have them re-examine the lists, one word at a time.

Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the blanks in the following sentence: "Words ending in *e* usually ..... this final *e* when a suffix beginning with a..... is added."

5. Background Experience: Write and pronounce the following words.

ceiling	believe	weigh
receive	chief	rein
deceive	piece	vein

Have the students pronounce the words, noting similarities and differences.

Discovering a Pattern: Ask the students if they noticed the differences in the order of the joined vowels *i* and *e* in the three columns. If not, have them re-examine each column, one word at a time.

Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the blanks in the following sentence: "In words including the joined vowels *i* and *e*, ... generally precedes ..... except after *c* or when the two vowels together make the sound *a*."

6. Background Experience: Write and pronounce the following words.

fan	fanning		
tip	tipping		
hit	hitting		
dim	dimming	dimmer	dimmest
snap	snapping	snapper	snapped
drop	dropping	dropper	dropped

Have the students pronounce the words, noting similarities and differences.

Discovering a Pattern: Ask students if they noticed any similarity in the formation of the words in columns 2, 3, and 4 from those in column 1. If not, have them re-examine the words, one at a time.

Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the blanks in the following sentence: "One syllable words ending in single ..... preceded by only one short ..... usually double the last ..... before adding suffixes beginning with vowels." Give examples to verify the statement, "The same principle applies to multi-syllable words when the accent falls on the final syllable of the root word."

permit/permitting
compel/compelling

Have the students pronounce the words, noting similarities and differences.

Discovering a Pattern: Ask students if they noticed the similarity in the formation of the first three words in column 2 from the first three in column 1, and the difference from those in the formation of the fourth word in column 2 from the fourth in column 1. If not, have them re-examine the words, one at a time.

Conceptualizing the Pattern: Ask if any student can give the class a statement of the principle at work here. If not, ask if any can fill in the blanks in the following sentence: "When one or two ..... precede a final *y*, the *y* changes to *i* when any suffix except those beginning with *i* is added."

Plan B. Comprehension: Some Inference Skills

Objectives: General

1. To build an awareness of implied or suggested facts and judgments in written material.

Specific

2. To alert students to the different connotations of words with similar meanings.
3. To alert students to the implications of words and phrases such as *however, although, in spite of the fact, nevertheless, but,* and *on the other hand.*

4. To teach students to infer setting (including time and place) from narrative or description.
5. To teach students to infer the nature of and facts about characters from their actions.
6. To teach students to infer the nature of and facts about characters from dialogue.

Procedure:

1. Awareness of facts and judgments implicit in reading material is to be built by providing students with first-hand experience of five types of inference. A brief final summary should emphasize that writers do not tell the reader everything they want him to know, but leave a great deal for him to interpret.

2. Background Experience: Ask students if they would prefer to be *pretty* or *handsome;* if they would prefer to have a *car* or *a convertible;* if they would prefer to be the *boss* or an *executive;* and if they would prefer being called a *brain* or an *intellectual.*
   Then ask them to distinguish between the two sentences in each of the following pairs:

   a. He is a *stingy* person.
   b. He is a *cautious* spender.

   a. She is *bony.*
   b. She is *slender.*

   a. That is a *gaudy* shirt.
   b. That is a *colorful* shirt.

   Discovering a Pattern: Ask a student to compare the italicized words in each pair of sentences. "Are they similar in meaning? Are they different?" Lead students toward a definition of "connotation."

   Conceptualizing the Pattern: In this and the remaining sections, the principle concept being taught is identical with the general concept of the lesson: In all written material, a great deal is left for the reader to interpret. This concept should be established explicitly in the final discussion.

3. Background Experience: Ask students to complete the following sentences:
   a. She is a wonderful neighbor *in spite of the fact* .....
   b. I think he is quite capable of handling the job *although* .....
   c. John is a dependable worker, *but* .....
   d. I highly recommend him for the job; he is, *however,* .....

   Discovering a Pattern: "Can you think of other phrases similar to those underlined above? What kind of attitude toward the person in question do the italicized words imply?"

4. Background Experience: Read the following passage:
   "The temperature was moderate — only five degrees below zero. The huskies pulled our sled over the icy terrain."

Discovering a Pattern: "Where does this take place? What season is it?" Invent similar passages which imply a setting more subtly, and ask the same questions about each.

5. Background Experience: Read the following passage:
"As my father and I walked through the tobacco field the blazing sun cast our shadows behind us. I changed my position from my father's right side to his rear. This enabled me to stop frowning, but my arms continued to itch."

Discovering a Pattern: "Were the characters walking toward or away from the sun? How can you tell?"
"What was the father's occupation?"
"What time of day was it?"

Background Experience: Set up a number of hypothetical situations in which only the character's actions are known. (For example, a boy dives into the raging waters of the Mississippi — is he emotionally upset, a daring fool, or a hero?)

Discovering a Pattern: "What else, besides a character's actions, do we need to know if we are to determine what kind of person he is?"

6. Background Experience: Read the following passage:
"What do you mean, homesick! I was drafted into this cruddy army for two years only — not three like you, George, but two. Look! Here I am in these hills of this forsaken country and Truman declares war because this is a strategic location. I could contribute more to my financial success if I were back home in my machine shop."

Discovering a Pattern: How much schooling do you think Peter has had?"
"What war is being fought?"
"What is probably Peter's status?"
"What does Peter feel is his obligation?"

Concluding Discussion: Conceptualizing the Pattern
Use the following passage, which includes several kinds of inference clues, and the questions concerning it to lead students into a general discussion of the inference skill.

The man's shiny shoes squeaked forward. His suit was cheap and ill-fitting but obviously new. A gray pallor deadened his pinched features. He had a shuttling glance and close-cropped hair. He stared closely at Purcell and said, "I want something in a cage."

"Something in a cage?" Mr. Purcell was a bit confused. "You mean — some kind of pet?"

"I mean what I said!" snapped the man. "Something alive that's in a cage."

"I see," hastened the storekeeper, not at all certain that he did. "Now let me think. A white rat, perhaps."

"No!" said the man. "No rats. Something with wings. Something that flies."

"A bird!" exclaimed Mr. Purcell.

"A bird's all right." The customer pointed suddenly to a suspended cage which contained two snowy birds. "Doves? How much for those?"

"Five-fifty. And a very reasonable price."

"Five-fifty?" The sallow man was obviously crest-fallen. He hesitantly produced a five-dollar bill. "I'd like to have those birds. But this is all I got. Just five dollars."

Mentally, Mr. Purcell made a quick calculation, which told him that at a fifty-cent reduction he could still reap a tidy profit. He smiled magnanimously. "My dear man, if you want them that badly, you can certainly have them for five dollars."

"I'll take them." He laid his five dollars on the counter. Mr. Purcell teetered on tiptoe, unhooked the cage, and handed it to his customer. The man cocked his head to one side, listening to the constant chittering, the rushing scurry of the shop. "That noise!" he blurted. "Doesn't it get you? I mean all this caged stuff. Drives you crazy, doesn't it?"

Purcell drew back. Either the man was insane, or drunk.

"Listen." The staring eyes came closer. "How long d'you think it took me to make that five dollars?"

"Why—why how long did it take you?"

"Ten years! At hard labor. Ten years to earn five dollars. Fifty cents a year."

Purcell sighed with sudden relief. He waddled to the window and stared out. Just outside, his peculiar customer had halted. He was holding the cage shoulder-high, staring at his purchase. Then, opening the cage, he reached inside and drew out one of the doves. He tossed it into the air. He drew out the second and tossed it after the first. They rose like wind-blown balls of fluff and were lost in the smoky grey of the wintry city. For an instant the liberator's silent and lifted gaze watched after them. Then he dropped the cage. A futile, suddenly forlorn figure, he shoved both hands deep in his trouser pockets, hunched down his head and shuffled away . . .

"Where has the stranger been for the last ten years?"

"What clues helped you answer number one?"

"What do the caged birds remind the stranger of?"

"Why might the stranger dislike the storekeeper?"

"Do you think the stranger might feel miserable after the birds are gone?"

The lesson plans above were designed for eighth grade students, taking into account their interests, vocabulary, and general ability. To teach the same topic to a group of another grade level would require considerable adjustment. Reading selections, in particular, should be chosen to appeal to the students' interests. Material of an eighth grade interest level and a fourth grade skill level, or fifth grade interest level and third grade skill level — material, in short, with a higher interest level than skill level — is available and should be employed when teaching elementary skills to older students.

APPENDIX I

THE ROLES OF PARTICIPANTS IN A REMEDIAL READING PROGRAM

I. *Role of Reading Clinic Personnel*

The reading clinic personnel will endeavor to:

A. Begin work in English Department by having conferences with the teacher involved to clarify the criteria for selecting students and the objectives of the remedial program.

B. Study the information available about each pupil on the screening list.

C. Work out a plan for calling in pupils for individual or group interviews and testing.

D. Establish rapport and favorable attitudes.

E. Explain to each pupil tested the purpose of the program.

F. Select and use diagnostic materials to determine the strengths and weaknesses of each pupil.

G. Make careful notes of findings before sending for the next group of pupils or pupil.

H. Describe and interpret the findings to the instructional staff explaining reasons for selecting or rejecting a pupil.

I. Plan each pupil's program selected and recommend a program for those rejected, grouping as well as possible under the circumstances within the instructional area. The reading staff has found that it is preferable to group pupils according to needs rather than by actual grade placement.

J. Keep teachers informed about materials used and the progress made by each pupil.

K. Arrange practical, workable schedules with time for conferences.

L. Inform Dean of Students of absences, tardies, and/or other circumstances.

M. Arrange time for conferences with teachers.

II. *Criteria for selection of pupils for Remedial Reading*

The following factors should be considered in selecting pupils for remedial reading classes.

A. Pupils who are assigned to remedial reading classes should have average or above intelligence. They should be retarded readers, not slow learners. They must have the potential to achieve at a level commensurate with pupils of at least average capabilities.

B. Retardation of six months or more in reading achievement as related to the pupil's ability. Pupils should not be rejected on the basis of the formula if penalized solely by a high intelligence quotient.

C. Preference should be given to those pupils who are likely to benefit most from remedial reading.

D. Continuous evaluation of pupil progress by the reading staff will determine the amount of time spent in the remedial class.

III. *Role of the Librarian*

The librarian is of great importance to the remedial reading program. She will help especially if she can:

A. Work with reading staff in the selection and securing of materials for individual pupils.

B. Be informed about the independent reading levels of pupils enrolled in remedial reading.

C. Guide the individual pupil in selection of materials for independent reading.

IV. *Role of the Classroom Teacher*

The classroom teacher will help the remedial program succeed if she will:

A. Follow the recommendations and complement as far as possible the program which the reading staff has planned for the individual child, using materials at the appropriate instructional level.

B. Encourage punctuality and individual responsibility for materials and attendance on the part of her students.

C. Encourage wide reading and assist pupils with book selections.

D. Avoid conflicts between pupil's particular interest and activities and the remedial reading class if possible.

E. Interpret the remedial reading program as a privilege rather than a punishment.

F. Adapt instruction, materials, and assignments to each child's instructional and independent level.

V. *Role of the Pupil*

The pupil will increase his chances of success if he will:

A. Apply reading and study skills in all reading.

B. Participate in the process of establishing realistic goals for himself.

C. Keep personal record of his progress in various skills, books read, etc.

D. Read widely for information and pleasure.

APPENDIX J

IMPORTANT BOOKS ON READING INSTRUCTION

Bond, Guy L. and Tinker, Miles A., *Reading Difficulties, Their Diagnosis and Correction,* Appleton-Century-Crafts, Inc., New York, N. Y.

Botel, Morton, *How To Teach Reading,* The Follet Publishing Co., Chicago, Ill.

Harris, Albert J., *Effective Teaching of Reading,* David McKay Co., Inc., New York.

Robinson, Helen M., *Corrective Reading in Classroom and Clinic,* University of Chicago Press, Chicago.

Smith, Henry P. and Deschant, Emerald V., *Psychology in Teaching Reading.* Prentice-Hall, Inc., Englewood Cliffs, N. J.

GLOSSARY

1. Antonyms — words that are opposite in meaning.
2. Accent — the prominence given to a syllable in a word that makes it stand out in comparison to adjacent syllables.
3. Auditory perception — mental awareness of sounds.
4. Basal reader approach — the development of basic reading abilities and means of special textbooks; the development of initial skills and abilities by means of basic readers (book materials at the readiness level with a following series for each grade level up to the 7th or 8th grade.)
5. Blend — the fusion of two or more sounds in a word without loss of identity of either sound.
6. Breve — a short half circle placed over a vowel to indicate a "short" sound.
7. Closed syllable — a syllable ending with a consonant (example—wet).
8. Compound word — words made up of two or more small words.
9. Configuration — pattern, general form, or shape of a word.
10. Consonant — a phoneme produced with more or less obstruction of the breath by tongue, teeth, and lips.
11. Consonant blends — a combination of two or more consonants in which the separate sounds are somewhat merged but are still distinguishable.
12. Consonant digraphs — two-consonant combinations that represent one sound. The common consonant digraphs are ch, sh, th, and wh.
13. Context clue — identifying a "new" reading word by anticipation of the meaning or through the words and ideas adjacent to the new word.
14. CSSD formula — context, sound, structure and dictionary.
15. Developmental reading program — a program in which a group or individual is given directed instruction in vocabulary development, silent read-

ing preparation, oral reading, rereading, and supplementary reading for the purpose of increasing reading achievement at the instructional level.

16. Diacritical marks — signs or small characters used to designate a particular sound value of a letter or letters.

17. Diagnosis — determination of the nature of disability or ability.

18. Diorama — picture that is usually looked at through a small opening. It is lighted in such a way as to be very realistic.

19. Diphthong — two sounds that are so closely blended together that they give the impression of one sound, such as oi and ow.

20. Directed reading activity — a reading lesson based on basal reading material; a developmental activity, in which provision is made for directed reading orientation, silent reading for survey purposes, vocabulary and comprehension development, silent or oral reading, and follow-up.

21. Directional suffixes — those additions made to the end of a word which denote direction (example—ern).

22. Double consonants — two consonants coming together, the first of the pair is usually sounded and the second is usually silent.

23. Experience approach — the development of basic reading skills and abilities through experience.

24. Frustrational level — the level at which the individual is thwarted by the difficulty of the material (see IRI).

25. Heteronymn — a word with the same spelling as another but having a different pronunciation and meaning.

26. Homonym — a word having the same pronunciation as another word but different in meaning and spelling.

27. Imagery — 1. images, 2. pictures formed by the mind, 3. descriptions and figures of speech that help the mind to form pictures.

28. Independent level — a comprehension of 90% of the material being used.

29. Instructional level — a comprehension of 75% of the material being used.

30. Macron — short horizontal mark placed over a vowel to indicate its long sound.

31. Metaphor — an implied comparison between two different things: a figure of speech in which a word or phrase that ordinarily means one thing is used in place of another thing in order to suggest a likeness between the two.

32. Open syllable — a syllable ending with a vowel (ex. go).

33. Phoneme — a unit of sound in spoken words. Phonemes are of three main kinds: consonant, vowel, and accent.

34. Perception — recognition or awareness of sensation.

35. Phonetic analysis — the analysis of a word into its phonetic elements for pronunciation purposes.

36. Phonetic sight word — a phonetic word taught as a sight word usually because other words conforming to the same phonetic principle occur infrequently.

37. Phonetic word — a word that is pronounced wholly or in part according to phonetic principles.

38. Phonetics — the science of speech sounds.

39. Phonics — the science of speech sounds as applied to reading.

40. Prefix — one or more letters or syllables combined with the beginning of the word to change or modify the meaning.

41. Rapport — mutually harmonious working relationships.

42. Reading readiness — a general development resulting in a desire, mental ability, and physical capacity for a given type of reading program.

43. Reading expectancy — a reading age or grade roughly comparable to the mental age or grade of the student.

44. Recreational reading — reading for pleasure and satisfaction.

45. Reading retardation — disabilities in the process of reading.

46. Regressive — backward.

47. Reversal tendency — the tendency of immature children or of children who have practiced immature habits to reverse or confuse letters and word forms.

48. Root — an original word form from which words have been developed by adding of prefixes, suffixes and inflectional endings.

49. Silent vowels — vowels that are not heard (ex. blu*e*).

50. Single consonant — one which is voiced (g, j, l, m, n, r, v, w, y, z,) or unvoiced (b, p, d, k, s, t).

51. Single vowel — a long sound or short sound. The long vowel sounds are the same as their alphabetical name. A vowel is short or modified when it is not pronounced as the vowel listed in the alphabet.

52. Structural analysis — the recognition of new words by noting roots, inflectional endings, and prefixes or suffixes added to root words.

53. Suffix — one or more letters or syllables added to the ending of a word to change the meaning.

54. Supplementary reading — a type of reading used to reinforce or to maintain ability which has been developed during the reading of basal materials, as differentiated from basal and independent reading.

55. Syllable — uninterrupted unit of speech containing one vowel sound, forming either a whole or part of a word; also, the letter or letters representing the spoken syllable.

56. Syllabication — the process of dividing words into syllables.

57. Visual discrimination — see *word discrimination.*

58. Voiceless sound — a consonant sound formed by the obstruction of the breath in the mouth and without vibration of the vocal cords.

59. Vowel — an unobstructed sound called an open sound because it is made with open throat, mouth, teeth, and lips.

60. Vowel blend or diphthong — two vowels occurring together which blend their sounds (ex. cr*ue*l).

61. Vowel digraph — a two-vowel combination that represents one sound. Usually the first vowel is long and the second vowel is silent (ex. boat). However, the first vowel may be silent, and the second vowel may be the one that is sounded. (ex. piece).

62. Vowels — sounds produced without obstructing the breath. The regular vowels are a, e, *i*, o, and u; y and w are semivowels.

63. Vowels controlled by consonants — vowel sounds that are somewhat modified when they are followed by *s* and *r*.

64. Word analysis — the analyzing of a "new" or of an unlearned "old" word into known elements for the purpose of identification.

65. Word discrimination — the ability to distinguish between the forms of configuration of words.

66. Word recognition — identification of a word by means of a context clue or structural analysis of the word form.